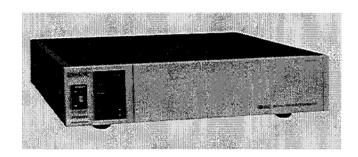
SONY

DIGITAL TIME BASE CORRECTOR

BVT-800PS



OPERATION AND MAINTENANCE MANUAL 1st Edition (Revised 12) Serial No. 10001 and Higher

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TABLE OF CONTENTS TABLE DES MATIERES INHALTSVERZEICHNIS

1. OPERATION	1. BETRIEB
1-1. Features	1-1. Besondere Merkmale 1- 1 (G) 1-2. Lage und Funktion der Bedienungselemente 1- 2 (G) 1-2-1. Bedienungspult 1- 2 (G) 1-2-2. Anschlußtafel 1- 6 (G) 1-3. Anschluß und Betrieb 1- 7 (G) 1-3-1. Anschluß eines BVU-800P/BVU800S oder BVU-820P/BVU-820S 1- 7 (G) 1-3-2. Anschluß eines BVU-800P/BVU-200S 1- 8 (G) 1-3-2. Anschluß eines BVU-200P/BVU-200S 1- 8 (G) 1-3-3. Anschluß an einen Videorecorder, der nicht zur BVU-Serie gehört und kein Capstan-Servosystem besitzt 1- 9 (G) 1-3-4. Anschluss für die Benützung des VITC (Vertical Internal Time Code) 1- 10(G) 1-3-5. Normaleinstellung 1- 11(G) 1-4. Technische Daten 1- 13(G)
1. FONCTIONNEMENT	
1-1. Caractéristiques	
1-4. Spécifications 1-13(F)	

2.	INSTALLATION	6.	PREPARATION FOR ALIGNMENT
2-1.	Unpacking and Repacking 2-1	6-1.	Test Equipment 6-1
2-2.	Accessories	6-2.	Equipment Connection 6-3
	2-1. Accessories Supplied 2-2	6-3.	Initial Setting of Switches & Controls 6-4
2-2	2-2. Optional Accessories 2-3		
2-3.	Matching Connector and Cable 2-3	7.	POWER SUPPLY ALIGNMENT
2-4.	Power Requirements 2-3		
2-5.	Installation Conditions 2-3	7-1.	Power Supply Adjustment without Load 7-1
2-6 .	Installation Space 2-4	7-1	-1. Switching Pulse Duty Adjustment
2-7.	Rack Mounting 2-5		without Load 7-1
2-8.	Altering PAL/SECAM System 2-7	7-1	-2. Voltage Adjustment without Load 7-1
2-9.	Switch and Control Setting 2-8	7-1	-3. Short Current Adj. without Load 7-2
2-9	9-1. Indicator Panel	7-2.	Regulator Output Voltage Adjustment
2-9	9-2. For Video Input Signal 2-11		with Load
2-9	9-3. For Video Output Signal 2-15		
2-9	9-4. For Remote Control 2-20	8.	DROPOUT PULSE GENERATOR
2-9	9-5. Connector Panel 2-21		ALIGNMENT
2-10.	Connection Examples 2-25		
2-11.	Specifications 2-28	8-1.	RF AGC Level Adjustment 8-1
	-	8-2.	DOC Killer Adjustment 8-1
3.	SERVICE INFORMATION	8-3.	DO Level Sensitivity Adjustment 8-2
3-1.	Printed Circuit Board Location 3-1	9.	SELECT H GENERATOR ALIGNMENT
3-2.	Cabinet Removal 3-1		
3-2	2-1. Cabinet Removal Flowchart 3-1	9-1.	Select H Generator Adjustment 9-1
3-2	2-2. Front Panel Removal 3-2		
3-2	2-3. Plug-in Board Removal 3-2	10.	AFC ALIGNMENT
3-2	2-4. Connector Panel Opening/Closing 3-2		
3-3	2-5. Side, Top and Bottom Cover Removal 3-3	10-1.	Sawtooth Wave Slope Adjustment 10-1
3-2	2-6. Indicator Panel Removal 3-3	10-2.	Narrow Range VCO Adjustment 10-1
3-2	2-7. Power Supply Unit Removal 3-4	10-3.	Wide Range VCO Adjustment 10-2
3-3.	Notes on Servicing		
3-3	3-1. Notes on the Power Supply Unit 3-5	11.	1140F _H VCO ALIGNMENT
3-3	3-2. Plug-in Board Lock Mechanism 3-5		(For PAL Model)
	3-3. Note on Square Fixed Inductor 3-5		
3-4.	Service Tools	11-1.	1140FH VCO Adjustment 11-1
3-5.	Notes on Repair Parts		•
	-	12.	INPUT HETERODYNE ALIGNMENT (For PAL Model)
4.	THEORY OF OPERATION		(FOT PAL MODE!)
4-1.	Outline of BVT-800PS 4-1	12-1.	
4-:	1-1. Outline of BVT-800PS PAL 4-3	12-2.	
	1-2. Outline of BVT-800PS SECAM 4-5	12-3.	-
4- 2.	Outline of Printed Circuit Boards 4-5	12-4.	Write Chroma Level Adjustment 12-2
5.	GENERAL INFORMATION FOR ALIGNMENT	13.	REFERENCE SYNC GENERATOR ALIGNMENT (For SECAM Model)
5-1.	Index of Adjustment Components 5-1	13-1.	D'R/D'B Detector Adjustment 13-1
5-2.	Alignment Flow Chart 5-3	13-2.	Internal Reference Frequency Adjustment . 13-1
5-3.	Board Replacement and Adjustment 5-3	13-3.	Blanking Generator Adjustment 13-2

-2- BVT-800PS

14.	(For SECAM Model)	17.	(For SECAM Model)
14-1.	Frequency Converter Adjustment 14-1	17-1.	•
14-2.	Carrier Null Adjustment 14-1		Adjustment
14-3.	DUB Chroma Level Adjustment 14-2	17-2.	•
14-4.	Bell Filter Adjustment 14-2	17-3.	Read Chroma Clamp Pulse Position
1 4- 5.	Pilot Insert Width Adjustment 14-2		Adjustment
1 4- 6.	Write O/E Generator Adjustment 14-3	17-4.	Modulator VCO Adjustment 17-2
14- 7.	Demodulator Output Level Adjustment 14-3	17-5.	Chroma Pedestal Level Adjustment 17-2
		17-6.	Modulator Input Level Adjustment 17-3
15.	VIDEO PROCESS ALIGNMENT	17-7.	Blanking Level Adjustment 17-3
		17-8.	Anti-Bell Filter Adjustment 17-4
15-1.	Noise Canceler Adjustment 1 15-1	17-9.	Modulator Output Level Adjustment 17-4
15-2.	Noise Canceler Adjustment 2 15-2		
15-3.	Video Level Adjustment 15-3	18.	VIDEO PHASE ALIGNMENT
15-4.	A/D Converter Reference Voltage		•
	Adjustment	18-1.	Video Phase Adjustment 18-1
	Input Level Indicator Calibration 15-3	18-2.	Y/C Delay Adjustment
15-6.	Y-Pedestal Adjustment		(For PAL Model) 18-1
15- 7.	Write Chroma Level & Write Chroma Pedestal	18-3.	Y/C Delay Preset Adjustment
	Level Adjustment 15-4		(For SECAM Model) 18-2
15- 8.	Y/C Delay Control Calibration 15-4		
15-9.	•	19.	VIDEO OUTPUT LEVEL ALIGNMENT
15-10.	Black Level Control Calibration 15-5		
1 5-11.	DG Compensation Control Calibration 15-6	19-1.	Output Y Level & Chroma Level
15-12.	Chroma Level Control Calibration 15-6		Adjustment 19-1
	·	19-2.	• • • • • • • • • • • • • • • • • • • •
16.	OUTPUT HETERODYNE ALIGNMENT	19-3.	
	(For PAL Model)	19-4.	Video Output Sync Level Adjustment 19-2
16-1.	D/A Output Level Calibration 16-1		
16-2.	Carrier Null Adjustment 16-1		
16-3.	Chroma Level Adjustment 16-2		
16-4.	Burst Offset Adjustment 16-2		
16-5.	Burst Width & Level Adjustment 16-2		
16-6.	Burst/Chroma Phase Adjustment 16-3		
16-7.	ACC Adjustment 16-4		
16-8.	Blanking Adjustment 16-4		
16-9.	•		
	DUB Burst Sampling Pulse Adjustment 16-5		
16-11.	DUB Carrier Null Adjustment 16-6		
	Pilot Blanking Adjustment 16-6		
16-13.	Write Chroma Level Adjustment 16-6		

			OPTIONAL FIXTURES
	PAL Overall Block Diagram		Chassis Assy D-1 Power Supply Assy D-3 Rear Panel Assy D-5
	CK-11 Board: Clock Generator		SG-67 Board D-9 SG-68 Board D-15 PR-40 Board D-19
В.	SEMICONDUCTOR PIN ASSIGNMENTS		CK-11 Board D-24 MB-35 Board D-26
	Semiconductor Index B-1 Diode B-2 Transistor B-2 IC B-3 PROM B-19		CN-46A Board D-26 IV-4A Board D-27 DP-24A Board D-28 PW-91A Board D-31 Frame D-31
C.	SCHEMATIC DIAGRAM AND BOARD LAYOUT		Accessories Supplied D-32 Packing Material D-32 Optional Fixture D-32
	SG-67 Board: PAL Sync Generator	E.	CHANGED PARTS
	MB-35 Board: Mother Board C-90		
	Frame Wiring		

SECTION 1 OPERATION

The BVT-800PS is a digital time base corrector for use with a color-under system VTR equipped with a capstan servo system which can upgrade the playback signal to satisfy broadcasting standards.

1-1. FEATURES

A wide correction range of 29 H

A window of 29 H (p-p) permits a wide range of time base error to be corrected. Even if the error exceeds the correctable range, no horizontal movement nor sync fluctuation occurs.

Interchangeability between PAL and SECAM systems

The BVT-800PS can be used for both PAL and SECAM systems only by exchanging the built-in circuit board. PAL and SECAM indicator will show you which board is installed into the BVT-800PS.

Dynamic tracking* of wide range of playback speed

When a BVU-820 series U-matic videocassette recorder is connected by the multi-core cable, the playback of -1 to +3 times normal playback speed is possible without any guard band noise.

Small and lightweight

Thanks to the new ICs for the A/D and D/A conversion and the newly designed signal processor, the BVT-800PS can reduce the size and weight for handy use.

Digital dropout compensator

An advanced digital dropout compensator replaces each luminance dropout with the signal of the previous line and each chrominance dropout with the signal of two lines before. This signal replacement is performed digitally so that no signal degradation occurs.

Video processor

The video level, chroma level, black level, burst/chroma phase (PAL model only), subcarrier phase (PAL model only) and sync phase can be adjusted. The burst/chroma phase, system subcarrier phase and system sync phase can be adjusted without interfering each other.

* Dynamic tracking is a trademark of Sony Corporation.

Built-in sync generator

The BVT-800PS can operate with an external sync signal or with a sync signal from the built-in sync generator. The subcarrier stability is ± 1 Hz at 20° C $\pm 5^{\circ}$ C for the PAL model and ± 100 Hz at 0° C to 40° C for the SECAM model.

Y/C delay control

The Y/C delay can be controlled up to ± 150 nsec.

DG compensation

Differential gain (DG) up to 20% can be compensated to zero. (PAL model only)

8 bits, Y:10.9 MHz/C:5.4 MHz sampling

The playback signal is converted to a digital signal by sampling with 8 bits Y:10.9 MHz/C:5.4 MHz, so no degradation of the picture of a duplicating tape occurs.

High speed synchronized playback

With a BVU-800 series or a BVU-820 series VTR, a color picture up to 5 times normal playback speed in forward and reverse direction can be synchronized with the reference signal. With a monochrome picture, synchronized play back from -40 to +40 times normal playback speed is possible.

Selection of V-blanking

The H lines from the seventh to the twenty seconds can be set to on and off independently with the switches on the built-in circuit board. In this way the V-blanking width can be selected.

Remote control

With the BK-2007 remote control unit (optional), the following level and phase adjustments can be renotely controlled.

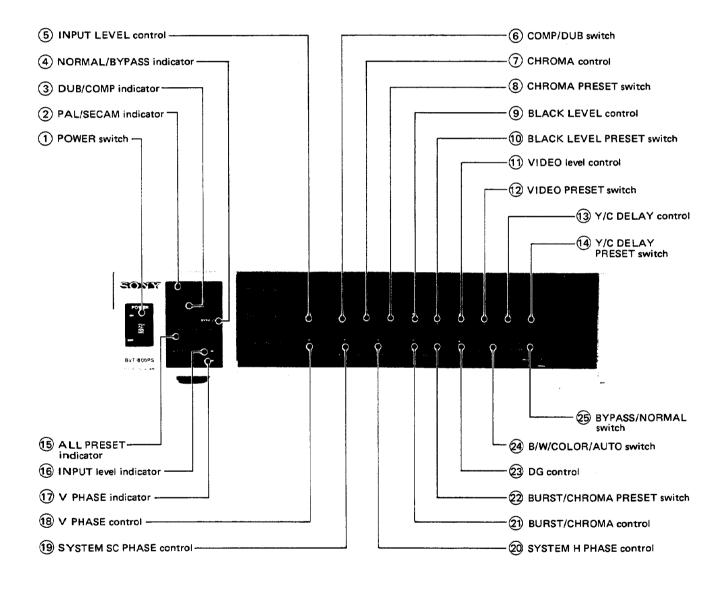
BVT-800PS(P) PAL model: Chroma level, video 1evel, black level, system sc phase, system sync phase, burst/chroma phase.

BVT-800PS(S) SECAM model: Chroma level, video level, black level, system sync phase.

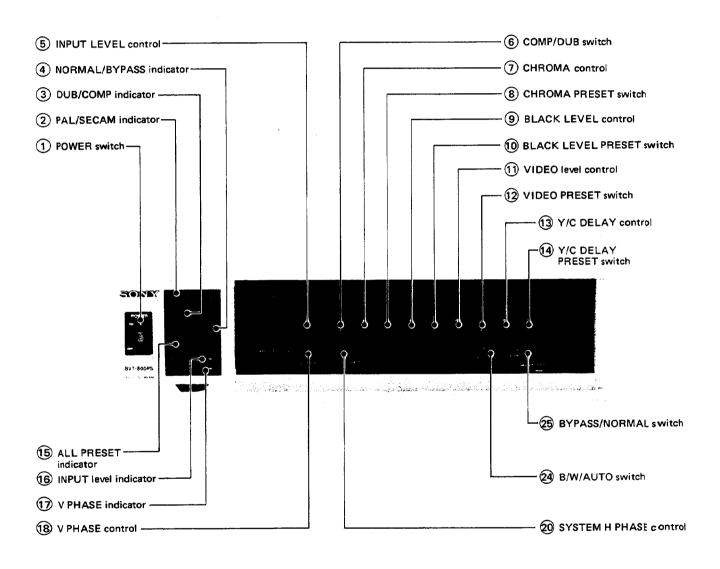
1-2. LOCATION AND FUNCTION OF PARTS AND CONTROLS

1-2-1. Control Panel

BVT-800PS(P) PAL model



BVT-800PS(S) SECAM model



1 POWER switch

Press the ON side to turn the power on.

(2) PAL/SECAM indicator

When the PAL sync generator board is installed, the PAL indicator will light and when the SECAM sync generator board is installed, the SECAM indicator will light.

3 DUB/COMP indicator

When the COMP-DUB switch is set to DUB or the BVU-800 series or the BVU-820 series VTR is connected to the FROM VTR connector with a multi-cable, the DUB indicator will light. However when the BVU-820P is in the Dynamic tracking playback or the simultaneous playback mode, the COMP indicator will light. In other cases, the COMP indicator will light.

4 NORMAL/BYPASS indicator

NORMAL or BYPASS will light depending on the setting of the BYPASS/NORMAL switch.

(5) INPUT LEVEL control

The video input level can be adjusted within a range of ±3 dB. The correct level is indicated in green on the INPUT level indicator.

(6) COMP/DUB switch

When a BVU-200P or a BVU-200S is connected to the DUB IN (U-matic H) connector with a dubbing cable, set this switch to DUB and the DUB indicator will light. When the other VTR is connected to the OFF TAPE VIDEO connector, set this switch to COMP and the COMP indicator will light

- When a BVU-800 series or a BVU-820 series VTR is connected to the FROM VTR connector with a multicable, the BVT-800PS is automatically set to the dub mode independent of the setting of this switch and the DUB indicator will light. However when the BVU-820P is in the Dynamic tracking playback or the simultaneous playback mode, the BVT-800PS is forcedly set to the COMP mode and the COMP indicator will light.
- In the dub mode, the signal skips the Y/C separation filter so that the bandwidth of the luminance signal will be wide.

(7) CHROMA control

The chroma level of the output signal can be adjusted within a range of ±3 dB when the CHROMA PRESET switch is set to the upper (manual) position. The adjustable range of the 100% color bars is 120%.

 When the SECAM signal is processed, care should be taken to avoid the over frequency modulation.

(8) CHROMA PRESET switch

Usually set to PRESET. In this position, the setting of the CHROMA control doesn't affect on the output signal. With

this switch the upper position, the chroma level can be adjusted with the CHROMA control.

9 BLACK LEVEL control

The black level of the output signal can be adjusted from 0 to 0.11 V when the BLACK LEVEL PRESET switch is set to the upper (manual) position.

(10) BLACK LEVEL PRESET switch

Usually set to PRESET. In this position, the setting of the BLACK LEVEL control doesn't affect on the output signal. With this switch the upper (manual) position, the black level can be adjusted with the BLACK LEVEL control.

(11) VIDEO level control

When the VIDEO PRESET switch is set to the upper (manual) position, the video level is adjusted as follows:

BVT-800PS(P)

The video (luminance and chrominance) output level can be adjusted within the range of ± 3 dB. This control does not adjust the sync signal level.

BVT-800PS(S)

Only the luminance level of the output signal can be adjusted within the range of ± 3 dB, to avoid the over frequency modulation of the chrominance signal. This control does not adjust the sync and the chrominance signal.

(12) VIDEO PRESET switch

Usually set to PRESET. In this position, the setting of the VIDEO level control doesn't affect on the output signal. With this switch the upper (manual) position, the video level can be adjusted with the VIDEO level control.

(13) Y/C DELAY control

When the Y/C DELAY PRESET switch is set to the upper (manual) position, the Y/C delay can be adjusted to 0 if the Y/C delay of the input signal is within the range of ± 150 nsec.

(14) Y/C DELAY PRESET switch

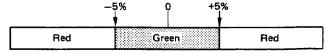
Usually set to PRESET. In this position, the adjusted value will be 0. With this switch the upper position, the Y/C delay can be adjusted with the Y/C DELAY control.

(15) ALL PRESET indicator

When the CHROMA PRESET, BLACK LEVEL PRESET, Y/C DELAY PRESET, VIDEO PRESET and BURST/CHROMA PRESET (BVT-800PS(P) only) switches are set to PRESET, this indicator will light.

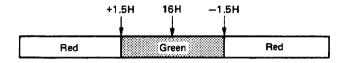
(16) INPUT level indicator

The proper input level is indicated in green on this indicator by observing the level of the sync signal.



(17) V PHASE indicator

The BVT-800PS delays the output signal by $16\,\mathrm{H}$ to the input signal so that the playback signal of the VTR is advanced by $16\,\mathrm{H}$ to the reference signal. If the delay of the playback signal is in the range of $16\,\mathrm{H} \pm 1.5\,\mathrm{H}$, the green part of this indicator will light. Adjust the V PHASE control so that the green part will light.



(18) V PHASE control

The playback signal can be adjusted so that it advances by 16 H to the reference signal. The proper level is indicated in green on the V PHASE indicator.

(19) SYSTEM SC PHASE control (for the BVT-800PS(P) only)

The subcarrier phase of the output signal can be adjusted to that of the reference signal. The adjustable range is 360° . This control does not effect on the video and sync phase.

(20) SYSTEM H PHASE control

The delay between the playback signal and the reference signal caused by the cable length can be compensated for by adjusting the system H phase with this control. The adjustable range is from $-1 \mu sec.$ to $+3 \mu sec.$

In the following illustration, the signal delay between the reference point and the input on the TBC is 550 nsec. The TBC OUT signal will be delayed an additional 550 nsec to return to the reference point so that the phase must be advanced by $1.1 \,\mu sec$.

22 BURST/CHROMA PRESET switch (for the BVT-800PS(P) only)

Usually set to PRESET. In this position, the setting of the BURST/CHROMA control doesn't affect on the output signal. With this switch the upper (manual) position, the burst/chroma phase can be adjusted with the BURST/CHROMA control.

23 DG (differential gain) control (for the BVT-800PS(P) only)

The DG of the U-matic VTR can be adjusted within a range of $\pm 20\%$.

24 B/W/COLOR/AUTO switch (PAL model) B/W/AUTO switch (SECAM model)

Set this switch to the position which corresponds to the signal connected to the OFF TAPE VIDEO input connector. B/W: The input signal is treated as a monochrome signal.

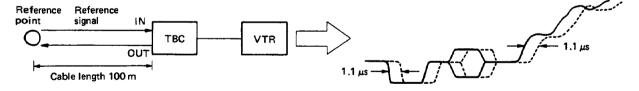
COLOR: The input signal is treated as a color signal.

AUTO: The input signal is identified as a monochrome signal or a color signal by its burst signal level. When the burst signal level is below the reference level (300 mV) by 12 ± 3 dB, the signal is identified as a monochrome signal.

25 BYPASS/NORMAL switch

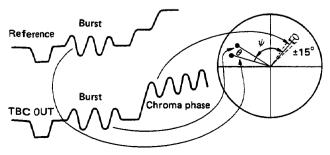
BYPASS: The input signal bypasses the circuit and will be fed out.

NORMAL: Normally set to this position. The time base error of the input signal is corrected before the signal is fed out.

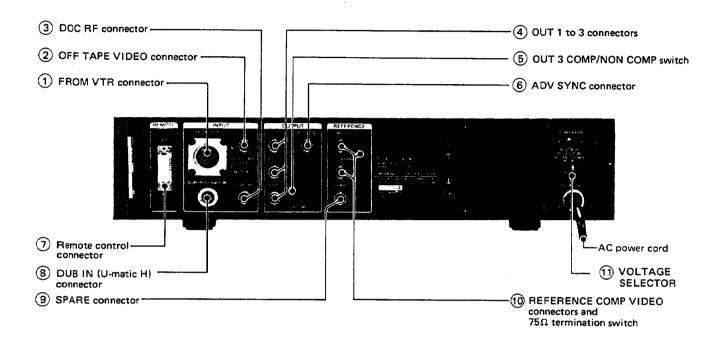


21) BURST/CHROMA control (for the BVT-800PS(P) only)

The burst/chroma phase (ψ) of the output signal can be adjusted within a range of $\pm 15^{\circ}$ when the BURST/CHROMA PRESET switch is set to the upper (manual) position. This control does not adjust the θ .



1-2-2. Connector Panel



(1) FROM VTR connector (18 pin) (for the BVU-800 series and the BVU-820 series VTR)

Connect to the TBC connector on the BVU-800 series or the BVU-820 series VTR with the supplied multi-core cable. This connection cuts the input to the OFF TAPE VIDEO connector (2).

2 OFF TAPE VIDEO connector (BNC type)

Connect to the video output connector on the VTR.

(3) DOC RF connector (BNC type)

Connect to the RF (OFF TAPE) connector on the VTR.

4 OUT 1 to 3 connectors (BNC type)

These connectors output the video signals. Connect to the video input connector on the equipment to be used. The output of the OUT 3 connector can be set to composite video or non-composite video by the COMP/NON COMP switch (5).

5 OUT 3 COMP/NON COMP switch

The output signal of the OUT 3 connector can be changed with this switch.

COMP: A composite video signal (VBS, the same as the OUT 1 and 2) is output.

NON COMP: A non-composite video signal (VB) is output.

6 ADV SYNC (advanced sync) connector (BNC type)

The sync signal which has been advanced by 16 H against

the reference signal is output here. Connect to the sync input on the VTR.

7 Remote control connector (15 pin)

Connect the BK-2007 remote control unit to control the BVT-800PS remotely.

(8) DUB IN (U-matic H) connector (7 pin)

Connect to the DUB OUT connector on the BVU-200P or the BVU-200S and the wide bandwidth can be obtained. When this connector is used, set the COMP/DUB switch on the front panel to DUB.

9 SPARE connector (BNC type)

No connections here.

(10) REFERENCE COMP VIDEO input connectors (BNC type) and 75-ohm termination switch

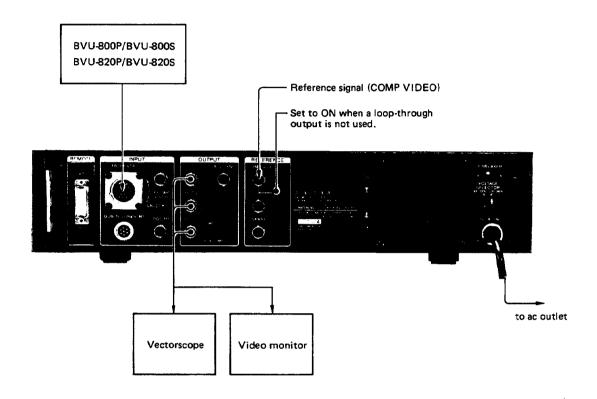
Connect a reference signal (BS or VBS) here. These two connectors are in "loop-through" configuration so that the input signal to one connector is fed directly to the other. When a loop-through output is used, be sure to set the 75-ohm termination switch to OFF. If such an output is not used, set the switch to ON.

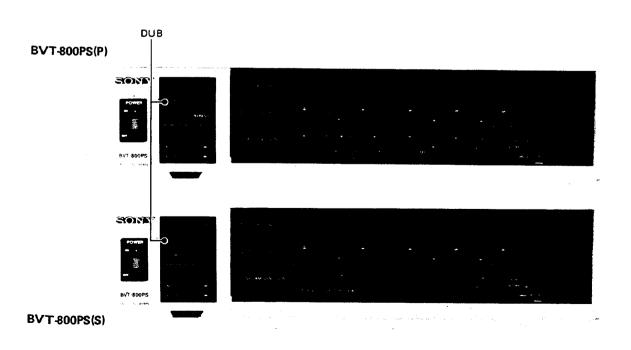
(11) VOLTAGE SELECTOR

Set to your local power voltage. If the selector must be reset, remove the cover, press the voltage selector switch, and replace the cover.

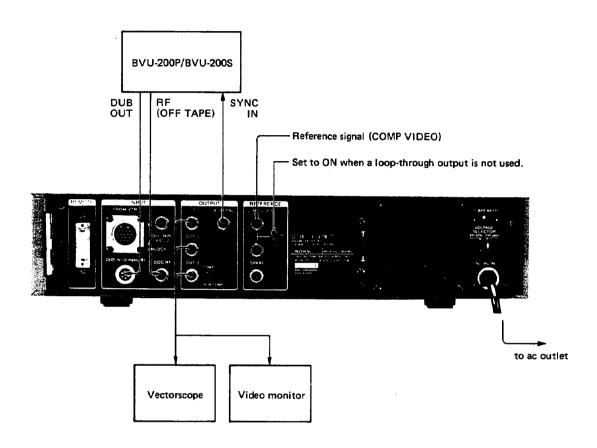
1-3. CONNECTIONS AND OPERATION

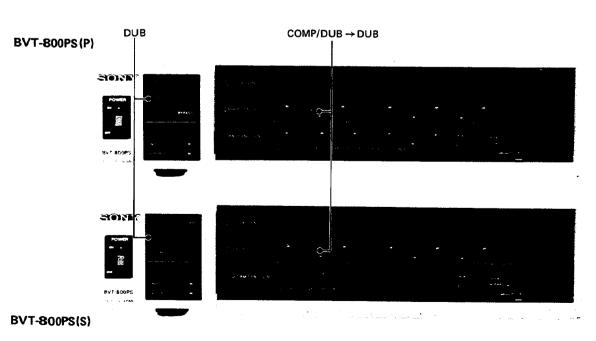
1-3-1. Connection with the BVU-800P/BVU-800S and BVU-820P/BVU-820S



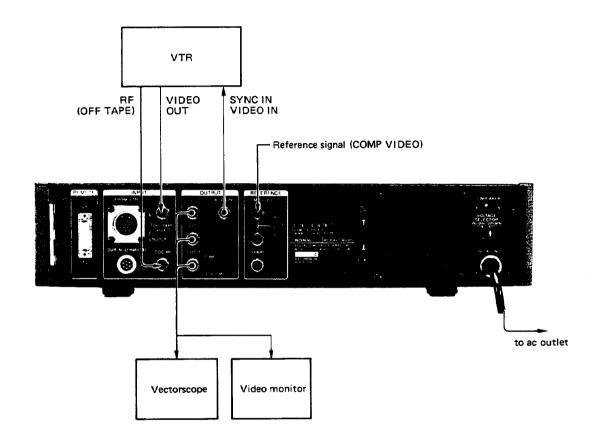


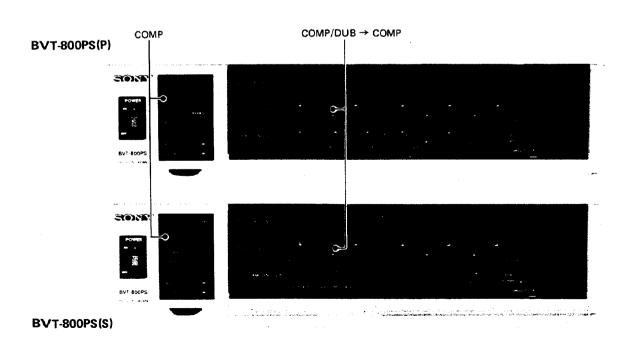
1-3-2. Connection with the BVU-200P/BVU-200S





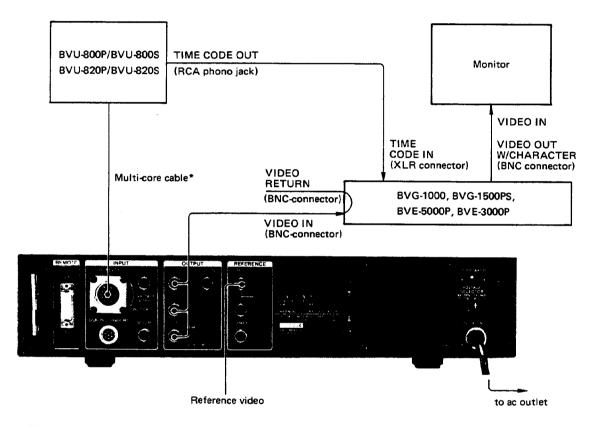
1-3-3. Connection with a VTR other than BVU-series VTR which is equipped with a capstan servo system





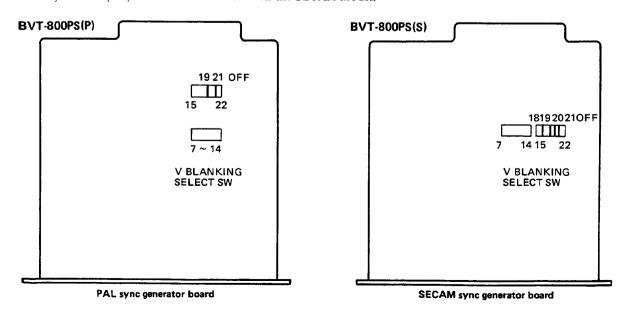
1-3-4. Connection to use the VITC (Vertical Interval Time Code)

Connect one of the BVU-800P, BVU-800S, BVU-820P or BVU-820S and one of the BVG-1500PS, BVG-1000, BVE-5000P or BVE-3000P.



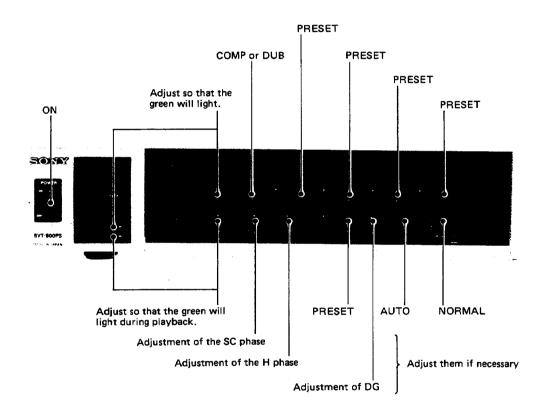
* When the BVU-200 series VTR is used, refer to 1-3-2.

When the VITC is used, be sure to set the V blanking select switches for 19 and 21 lines to OFF on the PAL model, or for 18, 19, 20 and 21 lines to OFF on the SECAM model.

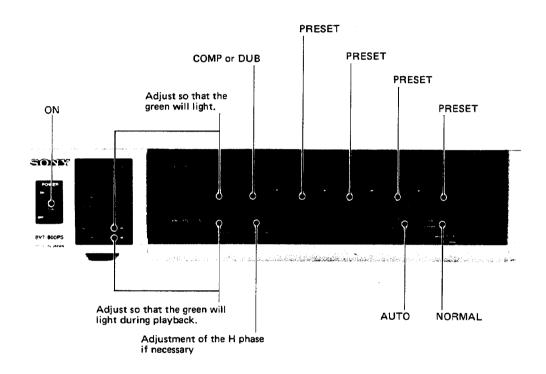


1-3-5. Standard Setting

BVT-800PS(P) PAL model



BVT-800PS(S) SECAM model



1-4. SPECIFICATIONS

General

Power requirement 100 - 120 V (90 - 132 V)/220 -

 $240\,V$ (198 - 264 V) ac selectable

50/60 Hz (48 - 62 Hz)

Power consumption

100 W

Operating temperature Storage temperature

0°C to 40°C (32°F to 104°F) -10°C to +60°C (14°F to

140°F)

Humidity

10 - 90% (non condensing)

Dimensions

 $424 \times 88 \times 515 \text{ mm (w/h/d)}$

 $(16 \ 3/4 \times 3 \ 1/2 \times 20 \ 3/8 \ inches)$

Weight

13 kg (28lb 10 oz)

Supplied accessories

Extension board EB-9A x1

Rack mount kit x1

(Handle x2, Screw B4x12 x4, Screw K4x10 x4)

Multi-core cable x1

Operation and maintenance manual x1

Design and specifications subject to change without notice.

		BVT-800PS (P) PAL	BVT-800PS(S) SECAM		
	Bandwidth COMP IN	Y: 2.5 MHz ±0.4 dB, 3.25 MHz -3 dB C: ±0.7 MHz -3 dB	Y: 2.5 MHz ±0.4 dB, 3.25 MHz -3 dB C: ±0.5 MHz -3 dB		
	DUB IN	Y: 3.5 MHz ±0.4 dB 4.3 MHz -3 dB C: ±0.75 MHz -3 dB	Y: 3.5 MHz ±0.4 dB 4.3 MHz -3 dB C: ±0.5 MHz -3 dB		
	Signal-to-noise ratio	55 dB	55 dB		
	DG	2%			
Video	DP	2°			
	K factor (2T pulse) COMP IN	4%	4%		
	DUB IN	2%	2%		
	Chrominance/luminance delay	10 nsec	10 nsec		
	Correction range	29 H(p-p)	29 H(p-p)		
	Residual error	Color: ±2.5 nsec Monochrome: ±15 nsec	±15 nsec		
	Off tape video	Composite 1.0 V(p-p) ±3 dB (adjustable), 75 ohms			
Input	DUB IN	Luminance: 0.5 V(p-p) ±3 dB (adjustable), 75 ohms Chrominance: 0.5 V(p-p), 75 ohms			
signal	DOC RF signal	0.5 V ±6 dB, 75 ohms			
	Reference comp video	1.0 V(p-p) ±3 dB, 75 ohms ON/OFF			
	Advance sync	2.2 V ±0.3 V, 75 ohms			
Output signal	Video output	1: 1.0 V(p-p) 2: 1.0 V(p-p) 3: 1.0 V(p-p) /0.7 V(p-p) (non-composite video)			
	Video level	±3 dB	±3 dB (luminance only)		
	Chroma level	±3 dB	±3 dB		
Output	Black level	0 - 0.11 V	0 - 0.11V		
controls	Burst/chroma phase	±15°			
	DG compensator	±20%			
	System sync phase	-1 to +3 μsec	-1 to +3 μsec		
	System sc phase	more than ±180° —			
	Y/C delay	±150 nsec	±150 nsec		

CHAPITRE 1 FONCTIONNEMENT

Le BVT-800PS est un correcteur de base de temps numérique destiné à travailler avec un magnétoscope à système sous-couleur (magnétoscope à sous-porteuses couleurs transposées vers les fréquences basses) équipé d'un servosystème de cabestan qui peut fournir un signal de lecture conforme aux normes de radio-diffusion.

1-1. CARACTERISTIQUES

Large plage de correction de 29 H

Une correction d'erreur de base de temps sur une plage de 29 H est possible, et si les erreurs devaient dépasser la plage de correction, aucun mouvement horizontal et aucune fluctuation de synchronisation ne se produirait.

Systèmes PAL et SECAM interchangeables

Par simple changement d'une plaquette de circuit enfichable, il est possible d'utiliser aussi bien le système PAL que le système SECAM, tandis qu'un témoin PAL ou SECAM signale celle qui est installée dans le BVT-800PS.

Alignement dynamique* sur une large plage de vitesse de lecture

Lorsqu'un magnétoscope U-matic de série BVU-820 est raccordé à l'aide du câble à âmes multiples, la lecture est possible de -1 à +3 fois la vitesse normale sans aucun bruit de la bande de sécurité.

Compacité et légèreté

Grâce à l'utilisation de nouveaux circuits intégrés pour la conversion analogique/numérique et numérique/analogique ainsi que d'un processeur de signal de conception nouvelle, les dimensions et le poids du BVT-800PS ont été réduits d'une manière considérable.

Compensateur numérique de manque de signal

Un compensateur numérique moderne remplace tout manque de luminance par le signal de la ligne précédente et tout manque de chrominance par le signal des deux lignes d'avant la perte. Comme ce remplacement du signal s'accomplit de façon numérique, il ne se produit aucune dégradation du signal.

Processeur vidéo

Il est possible d'ajuster le niveau vidéo, le niveau chroma, le niveau du noir, la phase de synchronisation couleur/chroma (modèle PAL uniquement), la phase de la sousporteuse (modèle PAL uniquement) et la phase de synchronisation. De plus, la phase de synchronisation couleur/chroma, la phase de sousporteuse du système et la phase de synchronisation du système peuvent se régler sans interférences mutuelles.

 Le terme "Alignement dynamique (Dynamic Tracking)" est une marque déposée de Sony Corporation.

Générateur de synchronisation incorporé

Le BVT-800PS peut fonctionner avec un signal de synchronisation externe ou avec un signal de synchronisation provenant du générateur de synchronisation incorporé. La stabilité de la sousporteuse est de ±1 Hz à 20°C ±5°C pour le modèle PAL et de ±100 Hz entre 0°C et 40°C pour le modèle SECAM.

Contrôle du retard Y/C

Le retard Y/C peut se contrôler jusqu'à ±150 nsec.

Compensation de gain différentiel

Le gain différentiel (DG) allant jusqu'à 20% peut être compensé à zéro. (Uniquement pour le modèle PAL)

Echantillonnage de 8 bits, Y:10,9 MHz/C:5,4 MHz

A la lecture, le signal est converti en un signal numérique par discrimination avec 8 bits Y:10,9 MHz/C:5,4 MHz, de sorte qu'aucune dégradation de l'image ne se produit lors de la copie d'une bande.

Image synchronisée à haute vitesse

Avec un magnétoscope de série BVU-800 ou de série BVU-820, il est possible de synchroniser avec le signal de référence une image couleur dont la vitesse de lecture va jusqu'à 5 fois la normale, en marche avant ou en marche arrière. Avec une image monochrome, une image synchronisée est possible de -40 à +40 fois la vitesse de lecture normale.

Sélection de la suppression de trame (V)

Les lignes H de la septième à la vingt-deuxième peuvent être mises en/hors service indépendamment à l'aide des sélecteurs de la plaquette de circuit incorporée; de cette façon, il est possible de choisir la largeur de suppression de trame (V).

Télécommande

Moyennant l'emploi de la télécommande BK-2007 (en option), les réglages de niveau et de phase ci-après peuvent se contrôler à distance.

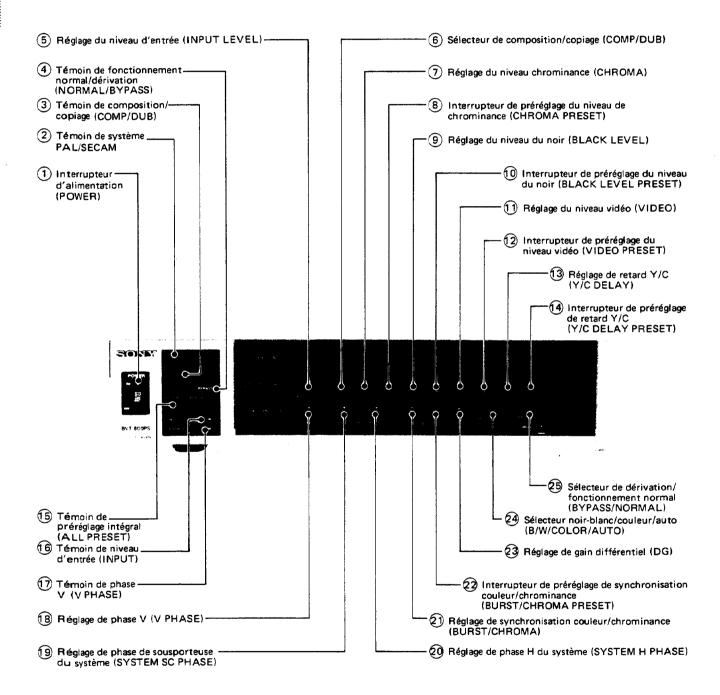
Modèle PAL BVT-800PS(P): Niveau chroma, niveau vidéo, niveau du noir, phase de sousporteuse du système, phase de synchronisation du système, phase de synchronisation couleur/chroma.

Modèle SECAM BVT-800PS(S): Niveau chroma, raiveau vidéo, niveau du noir, phase de synchronisation du système.

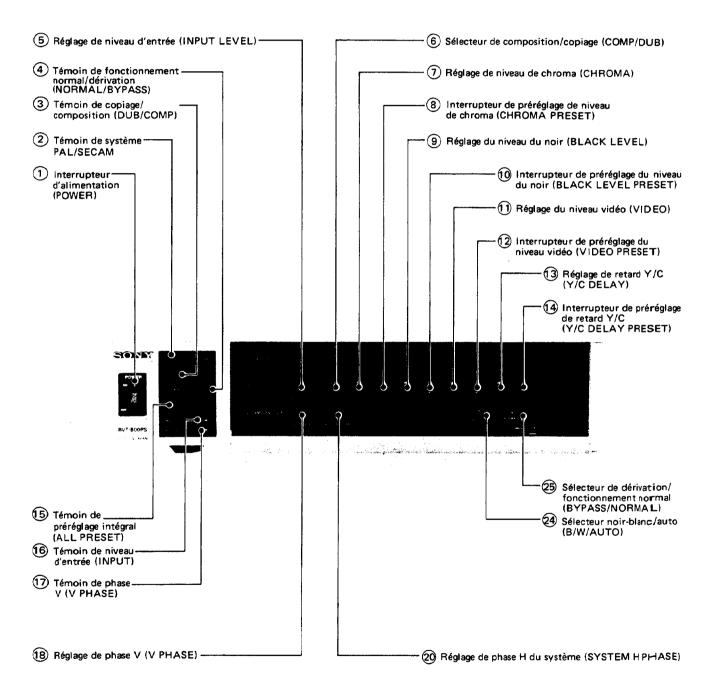
1-2. EMPLACEMENT ET FONCTION DES ORGANES ET DES COMMANDES

1-2-1. Panneau de Contrôle

Modèle BVT-800PS(P) pour système PAL



Modèle BVT-800PS(S) pour système SECAM



(1) Interrupteur d'alimentation (POWER)

Appuyer sur le côté marqué "ON" pour mettre l'appareil sous tension.

(2) Témoin de système PAL/SECAM (PAL/SECAM)

Le témoin PAL s'allume lorsque la plaquette de générateur de synchronisation PAL est installée; par contre, si la plaquette SECAM est utilisée, c'est le témoin SECAM qui s'allume.

(3) Témoin de copiage/composition (DUB/COMP)

Lorsque le sélecteur COMP-DUB est réglé sur DUB, ou que le magnétoscope de série BVU-800 ou de série BVU-820 est raccordé au connecteur FROM VTR à l'aide d'un câble multiple, le témoin DUB s'allume. Cependant, lorsque le BVU-820P est en mode de lecture à alignement dynamique ou en mode de lecture simultanée, le témoin COMP s'allume. Dans les autres cas, c'est le témoin COMP qui s'allume.

4 Témoin de fonctionnement normal/dérivation (NOR-MAL/BYPASS)

Le témoin NORMAL ou BYPASS s'allume d'après le réglage du sélecteur BYPASS/NORMAL (25).

(5) Réglage du niveau d'entrée (INPUT LEVEL)

Il permet d'ajuster le niveau d'entrée vidéo dans une plage de ±3 dB. Le niveau correct est signalé en vert sur l'indicateur de niveau d'entrée (INPUT).

(6) Sélecteur de composition/copiage (COMP/DUB)

Lorsqu'un BVU-200P ou un BVU-200S est raccordé au connecteur DUB IN (U-matic H) à l'aide d'un câble de copiage, on règlera ce sélecteur sur DUB, ce qui fera s'allumer le témoin DUB. Lorsqu'un autre magnétoscope est raccordé au connecteur OFF TAPE VIDEO, régler ce même sélecteur sur COMP et le témoin COMP s'allumera.

- Lorsqu'un magnétoscope de série BVU-800 ou BVU-820 est raccordé au connecteur FROM VTR à l'aide d'un câble multiple, le correcteur BVT-800PS sera automatiquement réglé au mode de copiage, quel que soit le réglage de ce sélecteur et le témoin DUB s'allumera. Cependant, si le BVU-820P est en mode de lecture à alignement dynamique ou en mode de lecture simultanée, le BVT-800PS est mis de force en mode COMP est le témoin COMP s'allume.
- En mode de copiage, le signal ignore le filtre de séparation Y/C de sorte que la largeur de bande du signal de luminance est large.

(7) Réglage du niveau de chroma (CHROMA)

Lorsque l'interrupteur CHROMA PRESET (8) est réglé à la position haute (manuel), le niveau chroma du signal de sortie peut se régler dans une plage de ±3 dB. La plage ajustable des bandes colorées 100% est de 120%.

 Lors du traitement d'un signal SECAM, il sera nécessaire d'éviter une surmodulation de fréquence.

(8) Interrupteur de préréglage de niveau de chroma (CHROMA PRESET)

On le laissera normalement à la position PRESET où le réglage CHROMA n'exerce aucune influence sur le signal de sortie. Quand cet interrupteur est à la position haute, un ajustement du niveau de chroma est possible à l'aide du réglage CHROMA (7).

(9) Réglage du niveau du noir (BLACK LEVEL)

Le niveau du noir du signal de sortie peut se régler entre 0 et 0,11 V quand l'interrupteur BLACK LEVEL PRESET

(10) est placé à la position haute (manuel).

(10) Interrupteur de préréglage du niveau du noir (BLACK LEVEL PRESET)

On le laissera normalement à la position PRESET où le réglage BLACK LEVEL 9 n'exerce aucune influence sur le signal de sortie. Quand cet interrupteur est à la position haute (manuel), le niveau du noir peut être ajusté à l'aide du réglage BLACK LEVEL.

(11) Réglage de niveau vidéo (VIDEO)

Lorsque l'interrupteur VIDEO PRESET (2) se trouve à la position haute (manuel), le niveau vidéo peut se régler comme suit:

BVT-800PS (P)

Le niveau de sortie vidéo (luminance et chrominance) peut se régler dans une plage de ±3 dB. Ce réglage est sans effet sur le niveau du signal de synchronisation.

BVT-800PS (S)

Seul le niveau de luminance du signal de sortie peut se régler dans une plage de ±3 dB pour éviter une surmodulation de fréquence du signal de chrominance. Ce réglage est sans effet sur le signal de synchronisation et de chrominance.

(2) Interrupteur de préréglage de niveau vidéo (VIDEO PRESET)

On le laissera normalement à la position PRESET où le réglage VIDEO (1) n'exerce aucune influence sur le signal de sortie. Quand cet interrupteur est à la position haute (manuel), le réglage du niveau vidéo permet d'ajuster ce niveau.

(13) Réglage de retard Y/C (Y/C DELAY)

Lorsque l'interrupteur Y/C DELAY PRESET est réglé à la position haute (manuel), le retard Y/C du signal d'entrée peut être ramené à "0" si le retard se situe dans la plage de ±150 nsec.

(14) Interrupteur de préréglage de retard Y/C (Y/C DELAY PRESET)

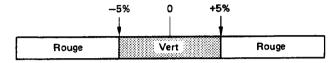
On le placera normalement à la position PRESET où la valeur ajustée sera "0". Quand il est placé à la position haute, le retard Y/C peut être ajusté à l'aide du réglage Y/C DELAY.

15) Témoin de préréglage intégral (ALL PRESET)

Il s'allume quand les interrupteurs CHROMA PRESET, BLACK LEVEL PRESET, Y/C DELAY PRESET, VIDEO PRESET et BURST/CHROMA PRESET (uniquement pour le BVT-800PS(P)) sont tous réglés à la position PRESET.

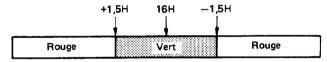
(16) Témoin de niveau d'entrée (INPUT)

Le niveau d'entrée approprié est affiché en vert sur cet indicateur par observation du niveau du signal de synchronisation



(17) Témoin de phase V (V PHASE)

Le BVT-800PS retarde le signal de sortie de 16 H par rapport au signal d'entrée de telle sorte que le signal de lecture du magnétoscope soit avancé de 16 H par rapport au signal de référence. Si le retard du signal de lecture se situe dans la plage de 16 H ± 1,5 H, la section verte de cet indicateur s'allume. Agir sur le réglage V PHASE (18) de sorte que cette partie verte s'allume.



(18) Réglage de phase V (V PHASE)

Le signal de lecture peut être réglé de sorte qu'il soit avancé de 16 H par rapport au signal de référence. Le niveau approprié est affiché en vert sur l'indicateur V PHASE.

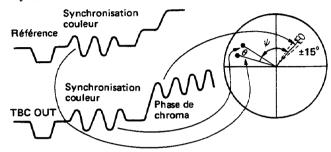
(19) Réglage de phase de sousporteuse du système (SYS-TEM SC PHASE) (pour le BVT-800PS(P) uniquement)

La phase de sousporteuse du signal de sortie peut être ajustée à celle du signal de référence sur une plage de réglage de 360°. Cette commande est sans effet sur le signal vidéo et sur la phase de synchronisation.

Réglage de phase H du système (SYSTEM H PHASE) Le retard entre le signal de lecture et le signal de référence, retard qui est causé par la longueur du câble, peut être compensé en ajustant la phase H du système grâce à ce réglage. La plage de cette compensation va de -1μ sec. à $+3 \mu$ sec. Sur l'illustration suivante, le retard de signal entre le seuil de référence et l'entrée sur le CBT est de 550 nsec. Ainsi, le signal de sortie du correcteur (TBC OUT) sera retardé de 550 nsec. supplémentaires pour revenir au seuil de référence et la phase doit donc être avancée de $1,1 \mu$ sec.

21) Réglage de synchronisation couleur/chroma (BURST/CHROMA) (pour le BVT-800PS(P) uniquement)

La phase de synchronisation couleur/chroma (ψ) du signal de sortie peut se régler dans une plage de $\pm 15^{\circ}$ quand l'interrupteur BURST/CHROMA PRESET se trouve à la position haute (manuel). Cette commande ne permet pas l'ajustement de θ .



22 Interrupteur de préréglage de synchronisation couleur/ chroma (BURST/CHROMA) (pour le BVT-800PS(P) uniquement)

On le laissera normalement à la position PRESET où le réglage BURST/CHROMA n'exerce aucune influence sur le signal de sortie. Quand cet interrupteur est à la position haute (manuel), le réglage BURST/CHROMA permet d'ajuster la phase de synchronisation couleur/chrominance.

23 Réglage de gain différentiel (DG) (pour le BVT-800PS(P) uniquement)

Le gain différentiel d'un magnétoscope U-matic peut se régler dans une plage de ±20%.

Sélecteur noir-blanc / couleur / auto (B / W / COLOR / AUTO) (pour le modèle PAL)
Sélecteur noir-blanc / auto (B / W / AUTO) (pour le modèle SECAM)

Choisir la position correspondant au signal raccordé au connecteur d'entrée OFF TAPE VIDEO.

B/W: Le signal d'entrée est traité comme un signal monochrome.

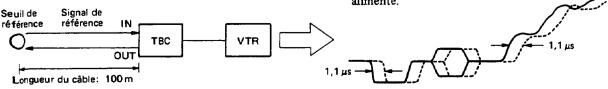
COLOR: Le signal d'entrée est traité comme un signal couleur.

AUTO: Le signal d'entrée est identifié comme signal monochrome ou signal couleur par son niveau de synchronisation couleur. Quand le signal de synchronisation couleur est inférieur au niveau de référence (300 mV) de 12 ± 3 dB, le signal est identifié comme le signal noir-blanc.

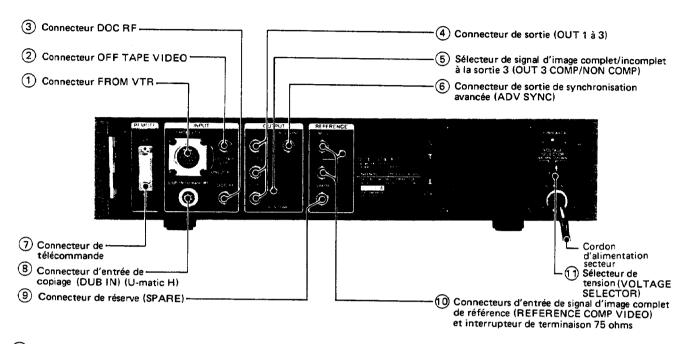
25 Sélecteur de dérivation/fonctionnement normal (BY-PASS/NORMAL)

BYPASS: Le signal d'entrée ne passe pas par le circuit.

NORMAL: Position habituelle où l'erreur de base de temps du signal d'entrée est corrigée avant que le signal me soit alimenté.



1-2-2. Panneau des connecteurs



(1) Connecteur FROM VTR (à 18 broches) (pour un magnétoscope de série BVU-800 et de série BVU-820)

Raccorder au connecteur TBC sur un magnétoscope de série

Raccorder au connecteur TBC sur un magnétoscope de série BVU-800 ou BVU-820 à l'aide du câble à âmes multiples fourni. Cette connexion coupe l'entrée au connecteur OFF TAPE VIDEO (2).

- 2 Connecteur OFF TAPE VIDEO (de type BNC)
 Raccorder au connecteur de sortie vidéo du magnétoscope.
- 3 Connecteur DOC RF (de type BNC)
 Raccorder au connecteur RF (OFF TAPE) du magnétoscope
- 4 Connecteurs de sortie OUT 1 à 3 (de type BNC)
 Ces connecteurs fournissent les signaux vidéo et on les raccordera au connecteur d'entrée vidéo de l'équipement utilisé. La sortie du connecteur OUT 3 peut être réglée au signal d'image complet ou incomplet à l'aide du sélecteur COMP/NON COMP (5).
- 5 Sélecteur de signal d'image complet/incomplet à la sortie 3 (OUT 3 COMP/NON COMP)

Le signal de sortie du connecteur OUT 3 peut être changé par ce sélecteur.

COMP: Un signal d'image complet (VBS, identique à celui de OUT 1 et 2) est fourni.

NON COMP: Un signal incomplet d'image (VB) est fourni.

6 Connecteur de sortie de synchronisation avancée (ADV SYNC OUTPUT) (de type BNC)

Le signal de synchronisation qui a été avancé de 16 H par

rapport au signal de référence est fourni ici. Raccorder à l'entrée de synchronisation sur le magnétoscope.

- 7 Connecteur de télécommande (à 15 broches)
 Pour contrôler à distance le BVT-800PS, raccorder ici l'unité de télécommande BK-2007.
- 8 Connecteur d'entrée de copiage (DUB IN) (U-matic H) (à 7 broches)

Raccorder au connecteur DUB OUT sur le BVU-200P ou sur le BVU-200S et l'on peut obtenir une forte largeur de bande. A l'emploi de ce connecteur, on placera sur DUB le sélecteur COMP/DUB sur le panneau avant.

- 9 Connecteur de réserve (SPARE) (de type BNC) Aucune connexion n'est effectuée ici.
- (10) Connecteurs d'entrée de signal d'image complet de référence (REFERENCE COMP VIDEO) (de type BNC) et interrupteur de terminaison 75 ohms

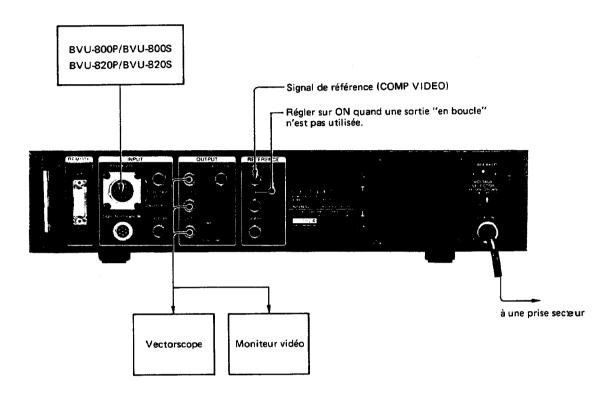
Raccorder ici un signal de référence. Comme ces deux connecteurs présentent une configuration "en boucle", le signal d'entrée de l'un est fourni directement à l'autre. A l'emploi d'une sortie "en boucle", veiller à placer l'interrupteur de terminaison 75 ohms sur OFF; on le laissera sur ON à l'emploi d'une sortie différente.

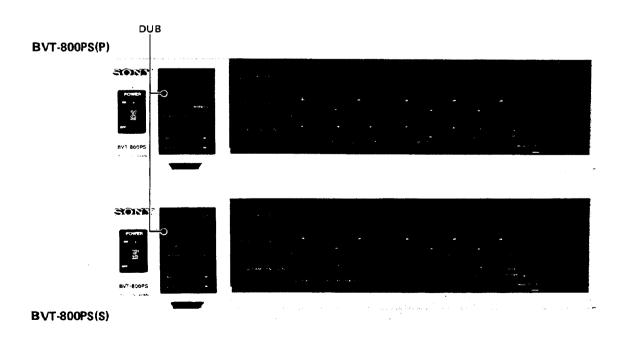
(1) Sélecteur de tension (VOLTAGE SELECTOR)

Il doit être réglé à la tension du secteur local. Si un réglage de ce sélecteur s'impose, déposer le couvercle, appuyer sur le sélecteur, puis replacer le couvercle.

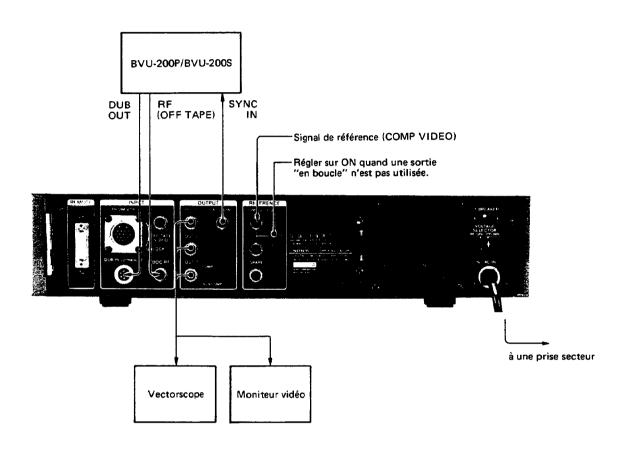
1-3. CONNEXIONS ET UTILISATION

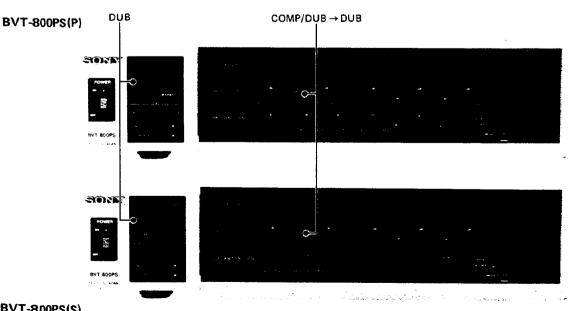
1-3-1. Connexions à un BVU-800P/BVU-800S et BVU-820P/BVU-820S





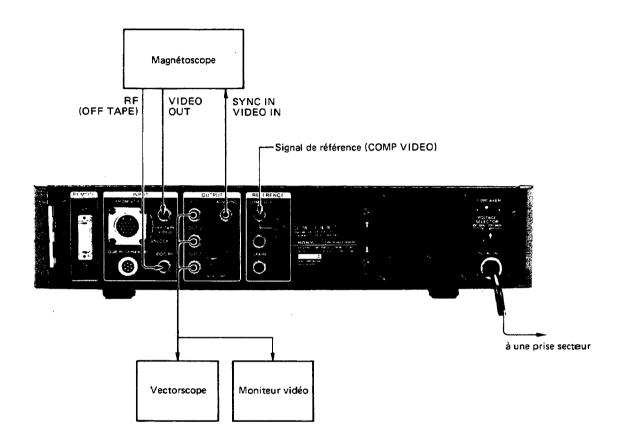
1-3-2. Connexion à un BVU-200P/BVU-200S

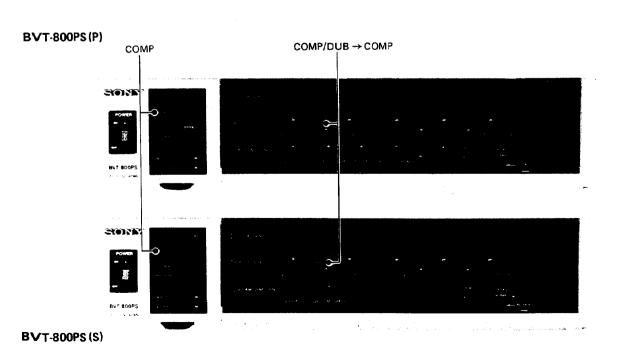




BVT-800PS(S)

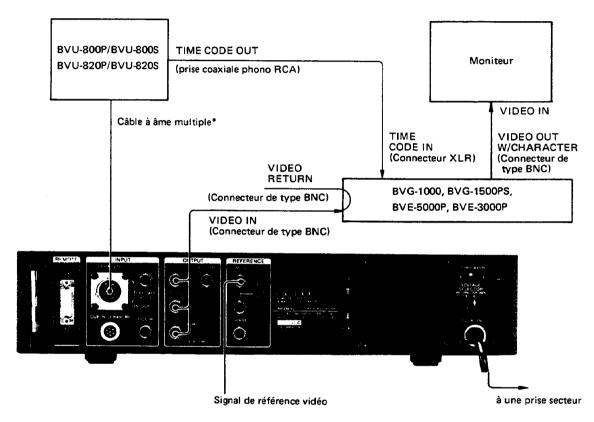
1-3-3. Connexion à un magnétoscope autre que celui de série BVU qui est prévu d'un servosystème de cabestan





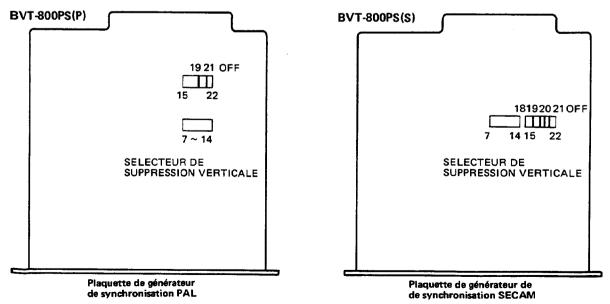
1-3-4. Connexion pour utiliser le VITC (code de temps à intervalle vertical)

Brancher un des magnétoscope BVU-800P, BVU-800S, BVU-820P ou BVU-820S et un des BVG-1500PS, BVG-1000, BVE-5000P ou BVE-3000P.



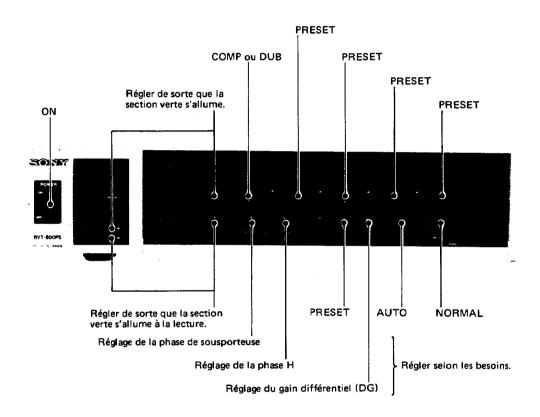
* Quand le magnétoscope de série BVU-200 est utilisé, se référer au chapitre 1-3-2.

Quand le VITC est utilisé, s'assurer de placer les sélecteurs de suppression verticale pour 19 et 21 lignes du modèle PAL ou pour 18, 19, 20 et 21 lignes du modèle SECAM, sur OFF.

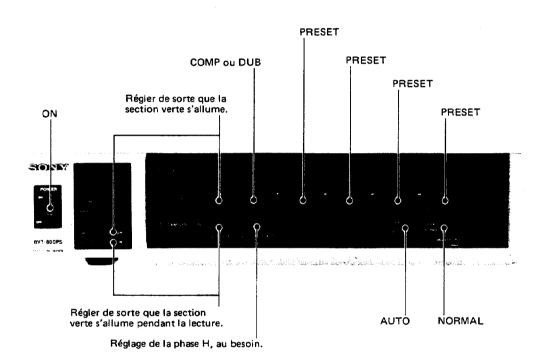


1-3-5. Réglages Fondamentaux

BVT-800PS(P) pour système PAL



BVT-800PS(S) pour système SECAM



1-4. SPECIFICATIONS

Données générales

Alimentation électrique

Secteur 100 - 120 V (90 - 132 V)/220 - 240 V (198 - 264 V) réglable, 50/60 Hz (48 - 62 Hz)

Consommation électrique

100 W

Plage des températures de fonctionnement

De 0°C à 40°C (de 32°F à 104°F)

Plage des températures d'immobilisation

 $De -10^{\circ}C à +60^{\circ}C (de 14^{\circ}F à 140^{\circ}F)$

Humidité

De 10 à 90% (non condensation)

Dimensions

424 x 88 x 515 mm (l/h/p)

 $(16 3/4 \times 3 1/2 \times 20 3/8 \text{ pouces})$

Poids

13 kg (28 livres 10 onces)

Accessoires fournis

Plaquette d'extension EB-9A x1 Nécessaire pour montage en rack x1 (Poignée x2, Vis B4x12 x4, Vis K4x10 x4) Câble à âmes multiples x1 Mode d'emploi et d'entretien x1

La conception et les spécifications peuvent être modifiées sans préavis.

		BVT-800PS(P) PAL	BVT-800PS(S) SECAM		
	Largeur de bande COMP IN	Y: 2,5 MHz ±0,4 dB, 3,25 MHz -3 dB C: ±0,7 MHz -3 dB	Y: 2,5 MHz ±0,4 dB, 3,25 MHz -3 dB C: ±0,5 MHz -3 dB		
	DUB IN	Y: 3,5 MHz ±0,4 dB, 4,3 MHz -3 dB C: ±0,75 MHz -3 dB	Y: 3,5 MHz ±0,4 dB, 4,3 MHz -3 dB C: ±0,5 MHz -3 dB		
	Rapport signal/bruit	55 dB	55 dB		
	Gain différentiel	2%			
Vidéo	Phase différentielle	2°			
	Facteur K (impulsion 2T) COMP IN	4%	4%		
	DUB IN	2%	2%		
	Retard chrominance/luminance	10 nsec.	10 nsec.		
	Plage de correction	29 H(c-c)	29 H(c-c)		
	Erreur résiduelle	Couleur: ±2,5 nsec. Monochrome: ±15 nsec.	±15 nsec.		
	Vidéo bande coupée	Composite 1,0 V(c-c) ±3 dB (réglable), 75 ohms			
Signal	Entrée copiage	Luminance: 0,5 V(c-c) ±3 dB (réglable), 75 ohms Chrominance: 0,5 V(c-c), 75 ohms			
d'entrée	Signal de référence DOC	0,5 V ±6 dB, 75 ohms			
	Référence de signal d'image complet	1,0 V(c-c) ±3 dB, 75 ohms en/hors service			
	Sync d'avance	2,2 V ±0,3 V, 75 ohms			
Signal de sortie	Sortie vdéo	1: 1,0 V(c-c) 2: 1,0 V(c-c) 3: 1,0 V(c-c) /0,7 V(c-c) (signal incomplet d'image)			
	Niveau vidéo	±3 dB	±3 dB (luminance seulement)		
	Niveau chroma	±3 dB	±3 dB		
	Niveau du noir	0 – 0,11 V	0 – 0,11 V		
Commandes	Phase de synchronisation couleur/chroma	±15°			
de sortie	Compensateur DG	±20%			
	Phase sync de système	de -1 à +3 μsec.	de -1 à +3 μsec.		
	Phase sousporteuse de système	plus de ±180°			
	Retard Y/C	±150 nsec.	±150 nsec.		

TEIL 1 BETRIEB

Bei Modell BVT-800PS handelt es sich um einen digitalen Time-Base-Corrector, der an einen Videorecorder mit Farbträger-Heruntersetzung und Capstan-Servosystem angeschlossen werden kann und das Wiedergabesignal für die Anforderungen im Rundfunkbereich aufarbeitet.

1-1. BESONDERE MERKMALE

Breiter Korrekturbereich von 29 H

Ein Fenster von 29 H (ss) erlaubt eine Zeitbasiskorrektur über einen weiten Bereich. Selbst wenn der Fehler diesen Korrekturbereich überschreitet, tritt weder eine horizontale Verschiebung noch eine Synchronisationsverschiebung auf.

Sowohl für PAL- als auch SECAM-Systeme verwendbar

Zur Umstellung von PAL auf SECAM braucht im BVT-800PS lediglich eine Leiterplatte ausgetauscht zu werden. PAL- und SECAM-Indikatoren zeigen an, welche Leiterplatte momentan im BVT-800PS eingesetzt ist.

Dynamic Tracking* (Dynamische Spurlage) für weiten Variationsbereich der Wiedergabegeschwindigkeit

Wird ein U-matic Videorecorder der BVU-820-Serie über ein mehradriges Kabel angeschlossen, so ist ein Variieren der Wiedergabegeschwindigkeit von -1 bis +3facher Normalgeschwindigkeit ohne Störungen vom Spurrasen möglich.

Kompakte und leichte Auslegung

Durch neue ICs im A/D- und D/A-Wandler sowie eines neu entwickelten Signalprozessors konnte der BVT-800PS äußerst kompakt und leicht ausgelegt werden.

Digitaler Dropoutkompensator

Ein hochwertiger digitaler Dropoutkompensator ersetzt Dropout-Stellen im Luminanzsignal durch das Signal der vorhergehenden Zeile und Dropout-Stellen im Chromasignal durch das Signal der zweitletzten Zeile. Da das Ersetzen der Zeilen digital geschieht, tritt keine Qualitätsminderung auf.

Videoprozessor

Videopegel, Chromapegel, Schwarzpegel, Burst/Chroma-Phase (nur beim PAL-Modell), Hilfsträger-Phase (nur beim PAL-Modell) und Sync-Phase können eingestellt werden. Burst/Chroma-Phase, System-Hilfsträger-Phase und System-Sync-Phase können ohne gegenseitige Beeinflussung eingestellt werden.

Eingebauter Synchronsignalgenerator

Der BVT-800PS kann mit einem externen Synchronsignal oder mit dem vom eingebauten Synchronsignalgenerator gelieferten Signal arbeiten. Die Hilfsträgerfrequenzstabilität beträgt ±1 Hz bei 20°C ±5°C (PAL-Modell) bzw. ±100 Hz bei 0°C bis 40°C (SECAM-Modell).

Y/C-Verzögerungsregler

Die Y/C-Verzögerung kann in einem Bereich von ±150 nsec eingestellt werden.

DG-Kompensation

Ein Differenzialgewinn (DG) bis zu 20% kann zu null gemacht werden. (Nur beim PAL-Modell)

8-Bit-Abtastung, Y:10,9 MHz/C:5,4 MHz

Das Wiedergabesignal wird durch eine 8-Bit-Abtastung (Y:10,9 MHz/C:5,4 MHz) in ein Digitalsignal umgewandelt, so daß beim Kopieren eines Bandes keinerlei Qualitätsminderung auftritt.

Synchronisierte Wiedergabe mit hoher Geschwindigkeit

Videorecorder der BVU-800- oder BVU-820-Serie liefern bis zur 5fachen Normalgeschwindigkeit in Vorwärts- und Rückwärtsrichtung, ein mit dem Referenzsignal synchronisiertes Farb-Wiedergabebild. Bei einem Schwarzweißbild ist eine synchronisierte Wiedergabe von -40 bis +40facher Normalgeschwindigkeit möglich.

Wahl der V-Austastung

Zur Einstellung der V-Austastung können die H-Zeiler von der 7 bis zur 22 unabhängig an den Schaltern der eingebauten Leiterplatte ein- und ausgeschaltet werden.

Fernbedienung

Mit den TBC-Fernbedien-Feld BK-2007 (Sonderzubehör) können folgende Pegel- und Phaseneinstellungen fernbe dient vorgenommen werden.

BVT-800PS(P), PAL-Modell: Chromapegel, Videopegel, Schwarzpegel, System-HT-Phase, System-Sync-Phase, Burst/Chroma-Phase

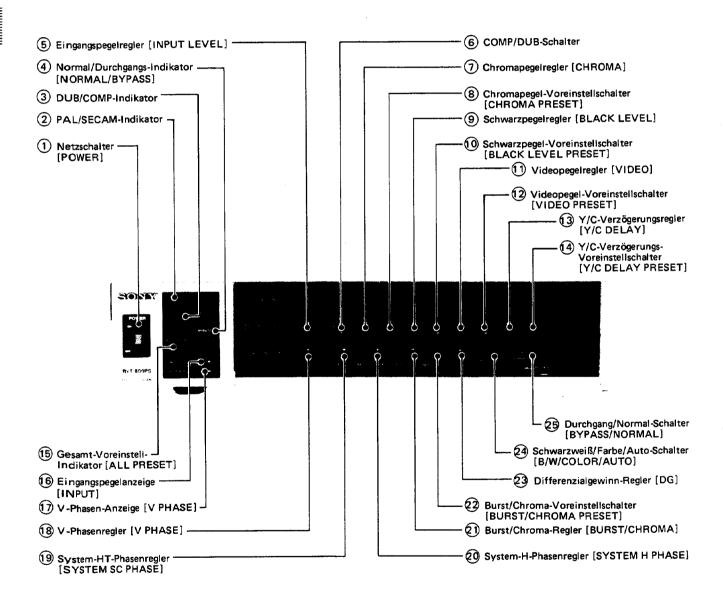
BVT-800PS(S), SECAM-Modell: Chromapegel, Videop egel, Schwarzpegel, System-HT-Phase.

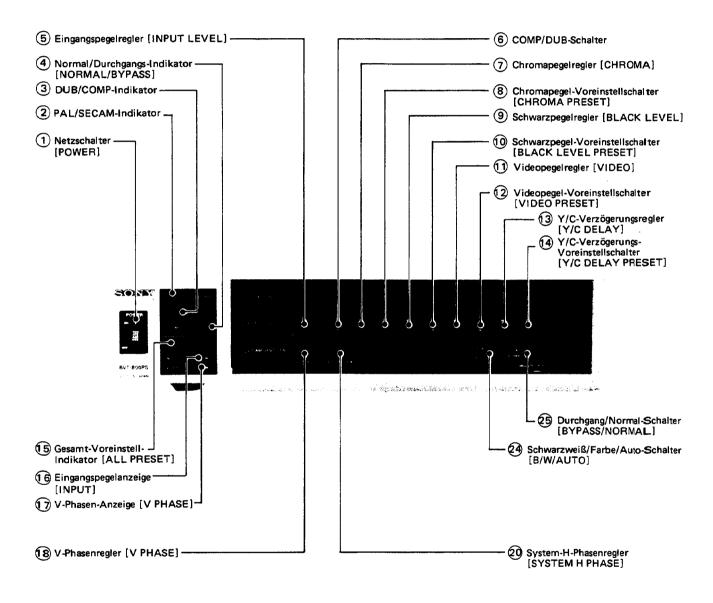
Dynamic Tracking ist ein Warenzeichen der Sony Corporation.

1-2. LAGE UND FUNKTION DER BEDIENUNGSELEMENTE

1-2-1. Bedienungspult

BVT-800PS(P), PAL-Modell





1 Netzschalter [POWER]

Zum Einschalten auf die "ON"-Seite des Schalters drücken.

(2) PAL/SECAM-Indikator

Ist die PAL-Synchronsignalgeneratorplatte eingesetzt, leuchtet der PAL-Indikator, und ist die SECAM-Synchronsignalgeneratorplatte eingesetzt, leuchtet der SECAM-Indikator.

(3) DUB/COMP-Indikator

Wenn der COMP-DUB-Schalter auf DUB gestellt ist oder ein Videorecorder der BVU-800/820-Serie an den FROM VTR-Anschluß über ein mehradriges Kabel angeschlossen ist, so leuchtet der DUB-Indikator. Ist der BVU-820P jedoch auf Wiedergabe mit dynamischer Spurlage oder Simultan-Wiedergabe geschaltet, so leuchtet der COMP-Indikator. In allen anderen Fällen leuchtet der COMP-Indikator.

4 Normal/Durchgangs-Indikator [NORMAL/BYPASS]
Entsprechend der Stellung des BYPASS/NORMAL-Schalters
leuchtet der NORMAL- oder der BYPASS-Indikator.

(5) Eingangspegelregler [INPUT LEVEL]

Der Videoeingangspegel kann in einem Bereich von ±3 dB eingestellt werden. Bei korrekter Pegeleinstellung leuchtet der grüne Indikator der INPUT-Pegelanzeige.

(6) COMP/DUB-Schalter

Wird ein BVU-200P oder ein BVU-200S an den DUB IN (U-matic H)-Anschluß mit einem Überspielkabel angeschlossen, so ist dieser Schalter auf DUB zu stellen. Der DUB-Indikator leuchtet dann auf. Wird ein anderer Videorecorder an den OFF TAPE VIDEO-Anschluß angeschlossen, so ist dieser Schalter auf COMP zu stellen. Der COMP-Indikator leuchtet dann

- Wird ein Videorecorder der BVU-800- oder BVU-820-Serie an den FROM VTR-Anschluß über ein mehradriges Kabel angeschlossen, so schaltet der BVT-800PS automatisch auf die Überspielfunktion unabhängig von der Stellung dieses Schalters und unabhängig davon, ob der DUB-Indikator leuchtet. Ist der BVU-820P jedoch auf Wiedergabe mit dynamischer Spurlage oder Simultan-Wiedergabe geschaltet, so wird der BVT-800PS zwangsweise auf COMP-Funktion geschaltet und der COMP-Indikator leuchtet.
- Bei Überspielbetrieb wird das Y/C-Trennungsfilter übergangen, so daß das Luminanzsignal eine größere Bandbreite aufweist.

7 Chromapegelregler [CHROMA]

Steht der CHROMA PRESET-Schalter in der oberen Stellung (manuell), so kann der Chromapegel des Ausgangssignals in einem Bereich von ±3 dB eingestellt werden. Bei einem 100% Standard-Farbbalkensignal erhält man dann am VIDEO OUT-Anschluß einen Chromapegel von 120%.

- Bei der Aufbereitung eines SECAM-Signals, ist darauf zu achten, eine Übermodulation zu vermeiden.
- (8) Chromapegel-Voreinstellschalter [CHROMA PRESET] Normalerweise auf PRESET stellen. In dieser Stellung hat der CHROMA-Regler keinen Einfluß auf das Ausgangssignal. Steht der Schalter dagegen in der oberen Stellung, so kann der Chromapegel am CHROMA-Regler eingestellt werden.

9 Schwarzpegelregler [BLACK LEVEL]

Steht der BLACK LEVEL PRESET-Schalter in der oberen Stellung (manuell), so kann der Schwarzpegel des Ausgangssignals von 0 bis 0,11 V eingestellt werden.

(10) Schwarzpegel-Voreinstellschalter [BLACK LEVEL PRESET]

Normalerweise auf PRESET stellen. In dieser Stellung hat der BLACK LEVEL-Regler keinen Einfluß auf das Ausgangssignal. Wird der Schalter dagegen nach oben (manuell) gestellt, so kann der Schwarzpegel am BLACK LEVEL-Regier eingestellt werden.

(11) Videopegelregler [VIDEO]

Steht der VIDEO PRESET-Schalter oben (manuell), so kann der Videopegel folgendermaßen eingestellt werden: BVT-800PS(P)

Das Video-Ausgangssignal (Lummanz und Chroma) kann in einem Bereich von ±3 dB eingestellt werden. Der Synchronsignalpegel wird dagegen nicht durch diesen Regler beeinflußt.

BVT-800PS(S)

Es wird nur der Luminanzpegel des Ausgangssignals in einem Bereich von ±3 dB eingestellt, um eine Übermodulation des Chromasignals zu vermeiden. Der Regler hat dagegen keinen Einluß auf das Synchron- und Chromasignal.

12 Videopegel-Voreinstellschalter [VIDEO PRESET]

Normalerweise auf PRESET stellen. Der VIDEO-Pegelregler hat dann keinen Einfluß auf das Ausgangssignal. Wird der Schalter nach oben gestellt (manuell), so kann der Videopegel am VIDEO-Pegelregler eingestellt werden.

(13) Y/C-Verzögerungsregler [Y/C DELAY]

Steht der Y/C DELAY PRESET-Schalter in der oberen Stellung (manuell), so kann die Y/C-Verzörung mit diesem Regler zu null gemacht werden, wenn die Y/C-Verzögerung des Eingangssignals einen Bereich von ±150 nsec nicht überschreitet.

(4) Y/C-Verzögerungs-Voreinstellschalter [Y/C DELAY PRESET]

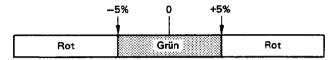
Normalerweise auf PRESET stellen. Der Verzögerungswert ist dann 0. Wird der Schalter nach oben gestellt, so kann die Y/C-Verzögerung am Y/C DELAY-Regler eingestellt werden.

(15) Gesamt-Voreinstell-Indikator [ALL PRESET]

Dieser Indikator leuchtet, wenn der CHROMA PRESET-, BLACK LEVEL PRESET-, Y/C DELAY PRESET, VIDEO PRESET- (und bei BVT-800PS(P) auch BURST/CHROMA PRESET-) Schalter auf PRESET gestellt sind.

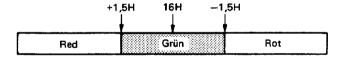
(16) Eingangspegelanzeige [INPUT]

Hier wird der Synchronsignalpegel angezeigt. Bei richtiger Einstellung des Eingangspegels leuchtet der grüne Indikator.



(17) V-Phasen-Anzeige [V PHASE]

Der BVT-800PS verzögert das Ausgangssignal um 16 H gegenüber dem Eingangssignal, so daß das Videorecorder-Wiedergabesignal um 16 H gegenüber dem Referenzsignal voreilt. Liegt die Verzögerung des Wiedergabesignals in einem Bereich von 16 H \pm 1,5 H, so leuchtet der grüne Indikator der Anzeige. Stellen Sie den V PHASE-Regler so ein, daß dieser grüne Indikator leuchtet.



(18) V-Phasenregler [V PHASE]

Hier kann das Wiedergabesignal so eingestellt werden, daß es um 16 H gegenüber dem Referenzsignal voreilt. Bei richtiger Einstellung leuchtet der grüne Indikator der V PHASE-Anzeige.

(19) System-HT-Phasenregler [SYSTEM SC PHASE] (nur bei BVT-800PS(P))

Die Hilfsträgerphase des Ausgangssignals kann hier dem Referenzsignal angepaßt werden. Der Einstellbereich beträgt 360°. Dieser Regler hat keinen Einfluß auf die Video- und Sync-Phase.

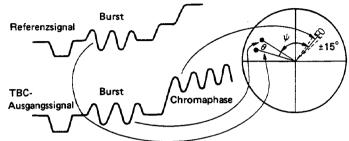
20 System-H-Phasenregler [SYSTEM H PHASE]

Die durch das Kabel verursachte Verzögerung zwischen Wiedergabe- und Referenzsignal kann kompensiert werden, indem an diesem Regler die System-H-Phase eingestellt wird. Der Einstellbereich beträgt $-1~\mu sec$ +3 μsec .

In der folgenden Abbildung beträgt die Signalverzögerung zwischen Referenzpunkt und Eingang des TBC 550 nsec. Bei der Rückkehr zum Referenzpunkt wird das TBC-Ausgangssignal noch einmal um 550 nsec verzögert, so daß eine Phasenvoreilung von 1,1 µsec eingestellt werden muß.

21) Burst/Chroma-Regler .[BURST/CHROMA] (nur bei BVT-800PS(P))

Hier kann die Burst/Chroma-Phase (ψ) des Ausgangssignals in einem Bereich von $\pm 15^{\circ}$ eingestellt werden, wenn der BURST/CHROMA PRESET-Schalter in der oberen Position (manuell) steht. Dieser Regler dient nicht zur Einstellung von θ .



22) Burst/Chroma/Voreinstellschalter [BURST/CHROMA PRESET] (nur bei BVT-800PS(P))

Normalerweise auf PRESET stellen. Der BURST/CHRO-MA-Regler hat dann keinen Einfluß auf das Ausgangssignal. Wird der Schalter dagegen in die oberen Position (manuell) gestellt, so kann die Burst/Chroma-Phase am BURST/CHROMA-Regler eingestellt werden.

23 Differenzialgewinn-Regler [DG] (nur bei BVT-800PS(P)) Hier kann die Differenzialphase eines U-matic Videorecorders in einem Bereich von ±20% eingestellt werden.

24 Schwarzweiß / Farbe / Auto-Schalter [B/W/COLOR/AUTO] (PAL-Modell)

Schwarzweiß / Auto-Schalter [B/W/AUTO] (SECAM-Modell)

Dieser Schalter ist entsprechend des dem OFF TAPE VIDEO-Anschluß zugeleiteten Signals einzustellen.

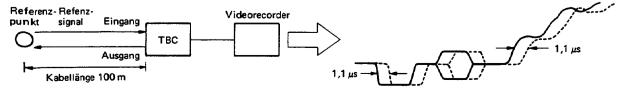
B/W: Das Eingangssignal wird als Schwarzweißsignal behandelt.

COLOR: Das Eingangssignal wird als Farbsignal behandelt. AUTO: Die Umschaltung zwischen Schwarzweiß und Farbe erfolgt automatisch durch Erkennung des Burstsignals. Liegt der Burstsignalpegel um 12 ± 3 dB unter dem Referenzpegel (300 mV), so wird das Signal als Schwarzweiß-Signal behandelt.

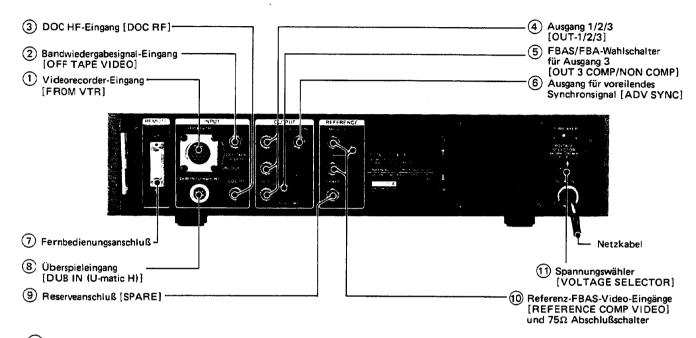
(25) Durchgang/Normal-Schalter [BYPASS/NORMAL]

BYPASS: Das Eingangssignal umgeht die Schaltkreise und wird direkt dem Ausgang zugeleitet.

NORMAL: Verwenden Sie normalerweise diese Stellung. Der Zeitbasisfehler des Eingangssignals wird korrigiert, und das korrigierte Signal kann am Ausgang abgegriffen werden.



1-2-2. Anschlußtafel



(1) Videorecorder-Eingang [FROM VTR] (18-polig, für Videorecorder der BVU-800- und BVU-820-Serie)

Verbinden Sie diesen Eingang über das mitgelieferte mehradrige Kabel mit dem TBC-Anschluß eines Videorecorders der BVU-800- oder BVU-820-Serie. Der OFF TAPE VIDEO-Eingang (2) wird dann desaktiviert.

(2) Bandwiedergabesignal-Eingang [OFF TAPE VIDEO] (BNC-Buchse)

Zum Anschluß an den Videoausgang des Videorecorders.

- 3 DOC HF-Eingang [DOC RF] (BNC-Buchse)
 Zum Anschluß an den RF (OFF TAPE)-Anschluß des
 Videorecorders.
- (4) Ausgang 1/2/3 [OUT-1/2/3] (BNC-Buchsen)
 Hier liegt das Videoausgangssignal an. Verbinden diese
 Ausgänge mit den Eingängen der zu verwendenden Geräte.
 Das am OUT-3-Anschluß herausgeführte Videosignal kann
 am COMP/NON COMP-Umschalter (5) zwischen FBAS und
 FBA umgeschaltet werden.
- 5 FBAS/FBA-Wahlschalter für Ausgang 3 [OUT 3 COMP/ NON COMP]

Zur Umschaltung des am OUT-3-Anschluß herausgeführten Signals.

COMP: Es liegt ein FBAS-Signal an (genau wie am OUT-1-und OUT-2-Anschluß).

NON COMP: Es liegt ein FBA-Signal an.

6 Ausgang für voreilendes Synchronsignal [ADV SYNC] (BNC-Buchse)

Hier liegt ein um 16 H gegenüber dem Referenzsignal vorei-

lendes Synchronsignal an. Verbinden Sie diese Buchse mit dem Synchronsignaleingang eines Videorecorders.

7 Fernbedienungsanschluß (15-polig)

Hier kann zur Fernbedienung des BVT-800PS das TBC-Fernbedien-Feld BK-2007 angeschlossen werden.

- (8) Überspieleingang [DUB IN (U-matic H)] (7-polig) Wird dieser Anschluß an den DUB OUT-Anschluß eines BVU-200P oder BVU-200S Videorecorders angeschlossen, so erhält man eine größere Bandbreite. Stellen Sie bei Verwendung dieses Anschlusses den COMP/DUB-Schalter am vorderen Bedienungspult auf DUB.
- 9 Reserveanschluß [SPARE] (BNC-Buchse) Kein Anschluß erforderlich
- 10 Referenz-FBAS-Video-Eingänge [REFERENCE COMP VIDEO] und 75Ω Abschlußschalter

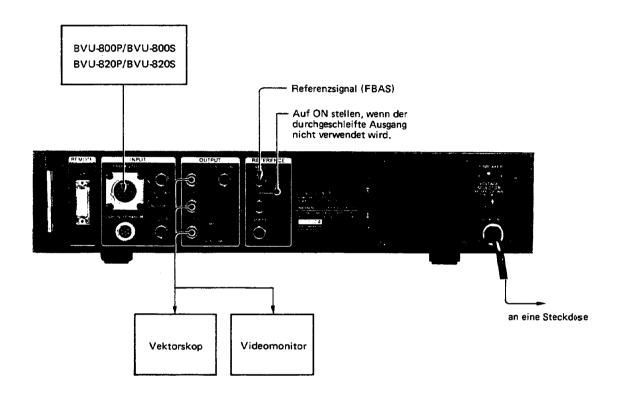
Leiten Sie hier ein Referenzsignal (FBAS oder Burst-Synchron) zu. Die beiden Eingänge sind durchgeschleift, so daß das einem der beiden Eingänge zugeleitete Signal direkt zum anderen Eingang geleitet wird. Wenn ein durchgeschleifter Ausgang verwendet wird, muß der 75Ω Abschlußschalter auf OFF gestellt werden. Wird kein durchgeschleifter Ausgang verwendet, so ist der Schalter auf ON zu stellen.

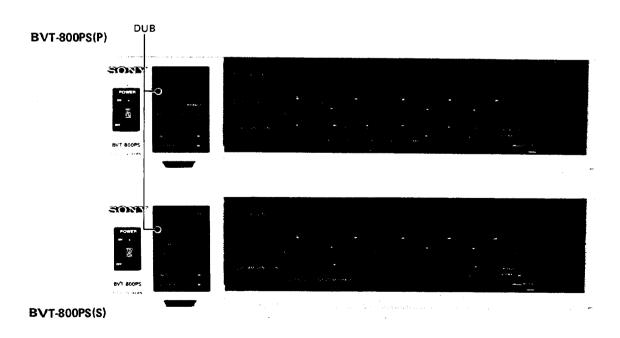
(11) Spannungswähler [VOLTAGE SELECTOR]

Zur Einstellung der Netzspannung. Ist eine Umstellung erforderlich, so nehmen Sie die Kappe ab, stellen Sie den Schalter um, indem Sie ihn drücken, und bringen Sie die Kappe wieder an.

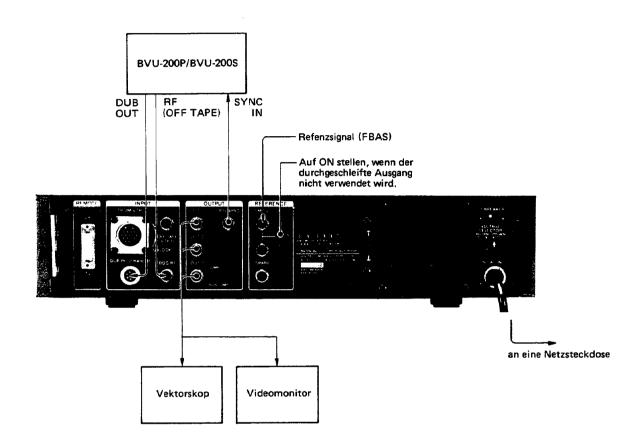
1-3. ANSCHLUSS UND BETRIEB

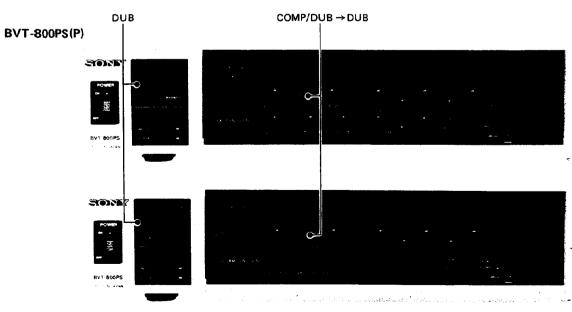
1-3-1. Anschluß eines BVU-800P/BVU-800S oder BVU-820P/BVU-820S





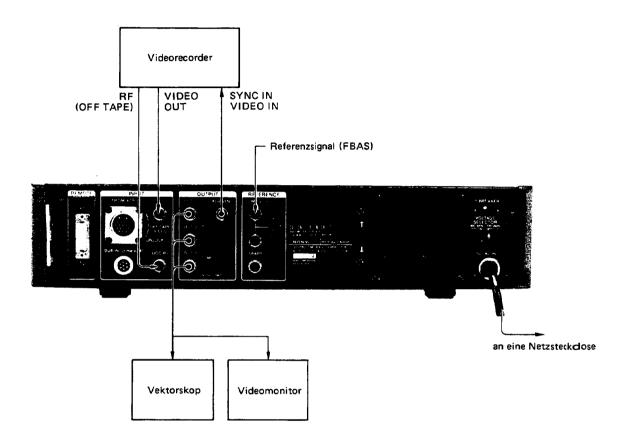
1-3-2. Anschluß eines BVU-200P/BVU-200S

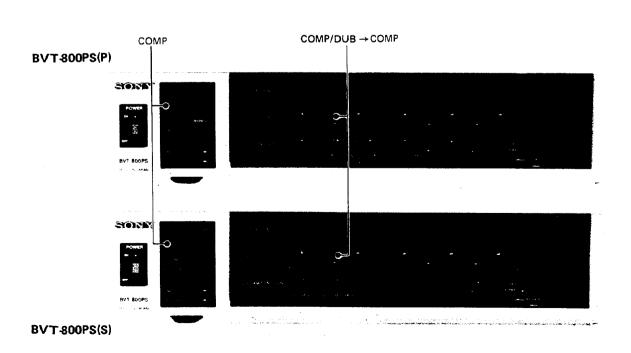




BVT-800PS(S)

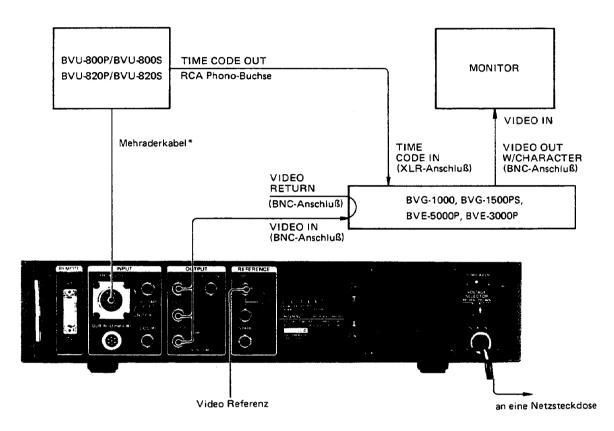
1-3-3. Anschluß eines Videorecorders, der nicht zur BVU-Serie gehört und kein Capstan-Servosystem besitzt





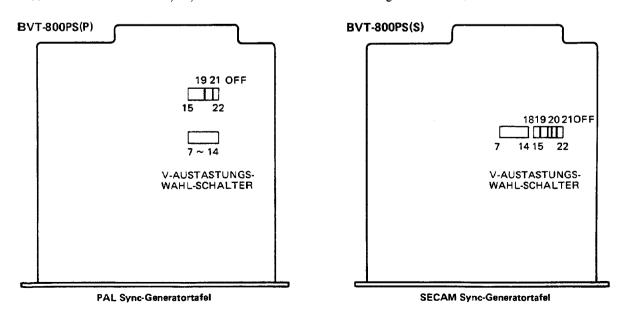
1-3-4. Anschluss für die Benützung des VITC (Vertical Interval Time Code)

Schliessen Sie einen BVU-800P, BVU-800S, BVU-820P oder BVU-820S und einen BVG-1500PS, BVG-1000, BVE-5000P oder BVE-3000 an.



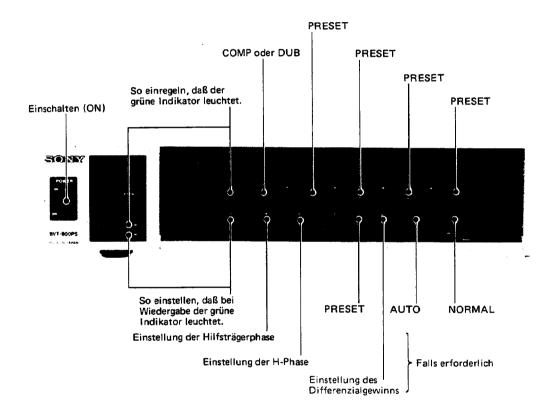
* Wenn ein Videorecorder der Serie BVU-200 gebraucht wird, beziehen Sie sich auf 1-3-2.

Bei Gebrauch des VITC, sich vergewissern dass die V-Austastungsschalter für die Zeilen 19 und 21 beim PAL-Modell oder für die Zeilen 18, 19, 20 und 21 beim SECAM-Modell ausgeschaltet sind.

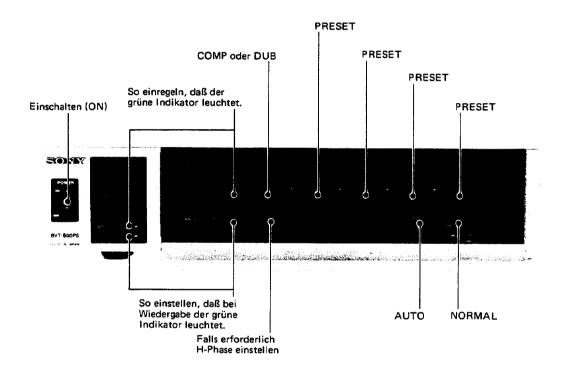


1-3-5. Normaleinstellung

BVT-800PS(P), PAL-Modell



BVT-800PS(S), SECAM-Modell



1-4. TECHNISCHE DATEN

Allgemeine Daten

Spannungsversorgung

100 - 120 V (90 - 132 V)/220 - 240 V (198 - 264 V) Wechselspannung einstellbar, 50/60 Hz (48 - 62 Hz)

Leistungsaufnahme 100 W

Betriebstemperatur 0°C bis 40°C

Anfbewahrungstemperatur

 -10° C bis $+60^{\circ}$ C

Feuchtigkeit

10% - 90% (nicht kondensiert)

Abmessungen

 $424 \times 88 \times 515 \text{ mm } (B/H/T)$

Gewicht

13 kg

Mitgeliefertes Zubehör

Verlängerungsleiterplatte EB-9 x1

Gestellmontagesatz x1

(Griff x2, Schraube B4x12 x4, Schraube K4x10 x4)

Mehradriges Kabel x1

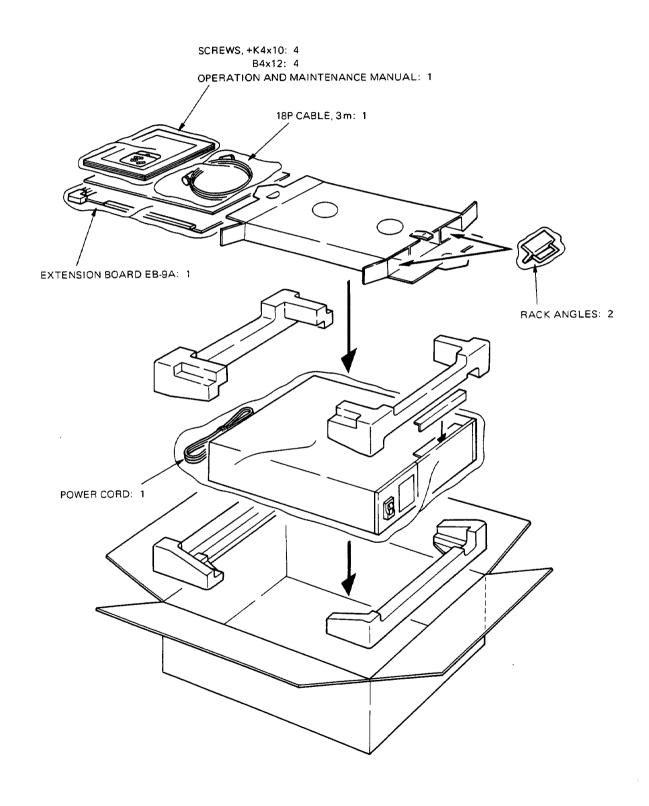
Bedienungs- und Wartungsanleitung x1

Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.

		BVT-800PS(P) PAL	BVT-800PS(S) SECAM	
	Bandbreite COMP IN	Y: 2,5 MHz ±0,4 dB, 3,25 MHz -3 dB C: ±0,7 MHz -3 dB	Y: 2,5 MHz ±0,4 dB, 3,25 MHz -3 dB C: ±0,5 MHz -3 dB	
	DUB IN	Y: 3,5 MHz ±0,4 dB, 4,3 MHz -3 dB C: ±0,75 MHz -3 dB	Y: 3,5 MHz ±0,4 dB, 4,3 MHz -3 dB C: ±0,5 MHz -3 dB	
	Signal-Rauschabstand	55 dB	55 dB	
Video	DG	2%		
	DP	2°		
	K-Factor (2T-Impuls) COMP IN	4%	4%	
	DUB IN	2%	2%	
	Chroma/Luminanz-Verzögerung	10 nsec	10 nsec	
	Korrekturbereich	29 H(s-s)	29 H(s-s)	
	Restfehler	Farbe: ±2,5 nsec Schwarzweiß: ±15 nsec	±15 nsec	
	Band-Videosignal	FBAS 1,0 V(s-s) ±3 dB (6	einstellbar), 75 Ohm	
Eingangssignal	DUB IN	Luminanz: 0,5 V(s-s) ±3 dB (einstellbar), 75 Oh Chroma: 0,5 V(s-s), 75 Ohm		
	DOC-Referenzsignal	0,5 V ±6 dB, 75 Ohm		
	Referenz-FBAS-Signal	1,0 V(s-s) ±3 dB, 75 Ohm (ein-/ausschaltbar)		
	Voreilende Synchronisation	2,2 V ±0,3 V, 75 Ohm		
Ausgangssignal	Videoausgang	1: 1,0 V(s-s) 2: 1,0 V(s-s) 3: 1,0 V(s-s)/0,7 V(s-s) (FBA-Signal)		
	Videopegel	±3 dB	±3 dB (nur Luminanz)	
	Chromapegel	±3 dB	±3 dB	
Regler	Schwarzpegel	0 - 0,11V	0 - 0,11V	
	Burst/Chroma-Phase	±15°		
	DG-Kompensation	±20%		
	System-Sync-Phase	-1 bis +3 μsec	-1 bis +3 μsec	
	System-HT-Phase	größer als 180°		
	Y/C-Verzögerung	±150 nsec	±150 nsec	

SECTION 2 INSTALLATION

2-1. UNPACKING AND REPACKING



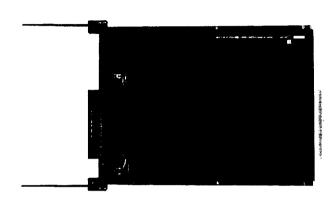
2-1

2-2. ACCESSORIES

2-2-1. Accessories Supplied

Extension Board EB-9A: 1

Used for checking and repairing the plug-in boards.



Rack Angles: 2 Screws, B4×12: 4 +K4×10: 4

One set of rack angles and screws is necessary for rack mounting.



18P Cable: 1

3 meter long 18P multi-core cable for connection of BVT-800PS and VTR.



Operation and Maintenance Manual: 1

2-2-2. Optional Accessories

SONY PAL Sync Generator Board BKT-801; 1 pc

This board is same as SG-67 board that is used in the BVT-800PS for PAL. When altering the BVT-800PS for SECAM to PAL, replace SG-68 board with BKT-801 i.e. SG-67 board

SONY SECAM Sync Generator Board BKT-802; 1 pc

This board is same as SG-68 board that is used in the BVT-800PS for SECAM. When altering the BVT-800PS for PAL to SECAM, replace SG-67 board with BKT-802 i.e. SG-68 board.

SONY Remote Control Unit BK-2007; 1 pc

Sliding Rails for Rack Mounting: 1 pair

ACCURIDE Model 203

Brackets for Rack Mounting: 4

ACCURIDE #5507-2

Rails and brackets for mounting BVT-800PS to the rack. The above parts should be ordered directly from the manufacturer:

STANDARD PRECISION INC.

12311 S, SHOEMAKER AVENUE SANTA FE SPRINGS, CALIFORNIA 90670 TEL (213) 944-6236

2-4. POWER REQUIREMENTS

Power Line Voltage AC100-120/220-240 V switchable

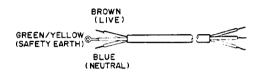
100-120 V mode AC90 to 132 V 220-240 V mode AC198 to 264 V Power Line Frequency 48 to 62 Hz

Power Consumption 100 W

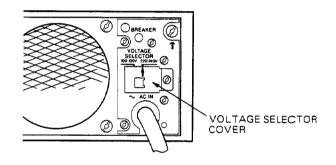
Power Cable Approx. 2.5 m in length

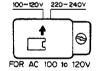
An AC plug should be locally pre-

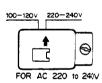
pared and mounted.



When changing the line voltage, remove the cover, set the voltage selector in accordance with the power line voltage to be used and place the cover.







2-3. MATCHING CONNECTOR AND CABLE

VTR Connector

Use 18P multi-core cable supplied (length 3 m) and no other cables.

DUB IN Connector

Use 7-pin VDC-5 cable (length 5 m) or VDC-3 (length 2 m). One cable is supplied with Sony BVU-200P/S and BVU-800/820P/S series VTRs.

REMOTE Connector

Use the 15-pin ribbon cable supplied with SONY Remote Control Unit BK-2007.

Other connectors are all BNC type.

2-5. INSTALLATION CONDITIONS

Operating Condition Temperature 0 to +40°C

Humidity 10 to 90% (noncoldensing)

Storage Condition Temperature $-10 \text{ to } +60^{\circ}\text{C}$

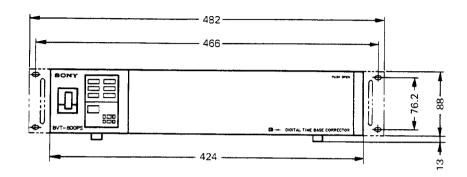
Humidity 10 to 90%

Do not install in the following types of location.

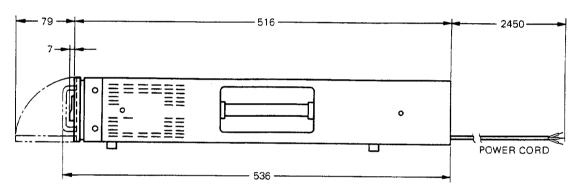
- 1. Dusty places
- 2. Places subjected to vibration
- 3. Places exposed to strong magnetic or electric fields
- 4. Places exposed directly to sun light or powerful light

2-6. INSTALLATION SPACE

Front

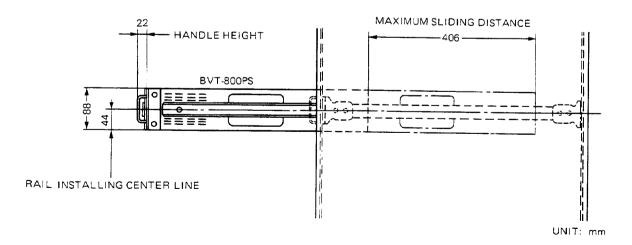


Right Side

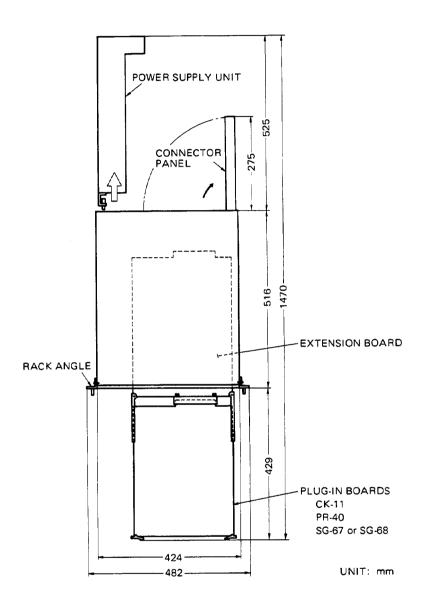


UNIT: mm

Rack Mounting



Working Space



2-7. RACK MOUNTING

Parts to be prepared

Slide Rails for Rack Mounting: 1 pair

(consisting of two inner members and two outer members)

ACCURIDE Model 203, length 22" (559 mm)

Brackets for Rack Mounting: 4

ACCURIDE #5507-2

Slide Rail/Inner Member Connecting Screws: 4

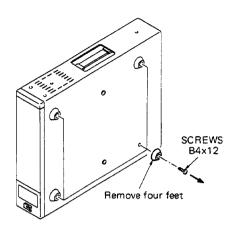
Accessory supplied +K4x10

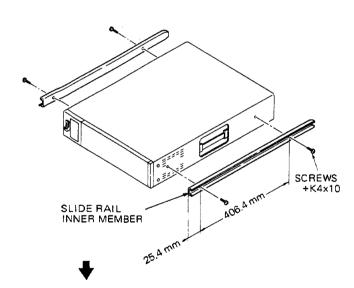
Rack Angles: 2 Accessory supplied

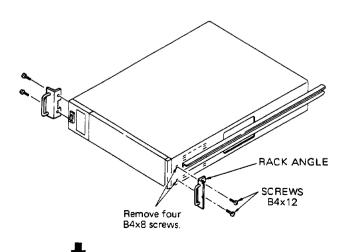
Rack Angle Mounting Screws: 4

Accessory supplied B4x12

Rack Mounting Procedure





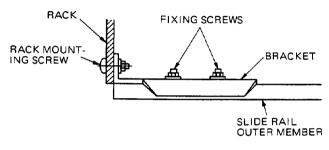




Connect the bracket to the outer members. Mount this same bracket to the rack and fasten the bracket fixing screws.

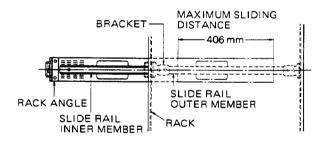
Note:

Use the fixing screws and rack mounting screws recommended by the slide rail manufacturer.





Mount the equipment to the rack.



2-8. ALTERING PAL/SECAM SYSTEM

There are two types of BVT-800PS i.e. for PAL and for SECAM. The PAL BVT-800PS is equipped with SG-67 PAL sync generator board and the SECAM BVT-800PS is equipped with SG-68 SECAM sync generator board. When altering the BVT-800PS to PAL or SECAM, replace the sync generator board. The replacement sync generator board is available in the following model name.

BKT-801: SONY PAL Sync Generator Board

(SG-67 board)

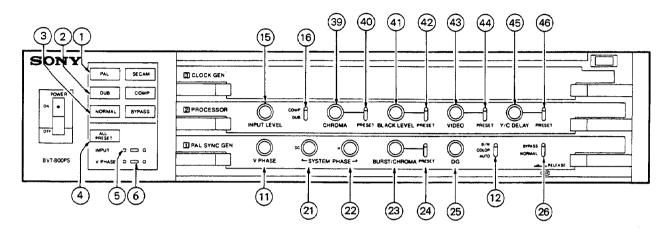
BKT-802: SONY SECAM Sync Generator Board

(SG-68 board)

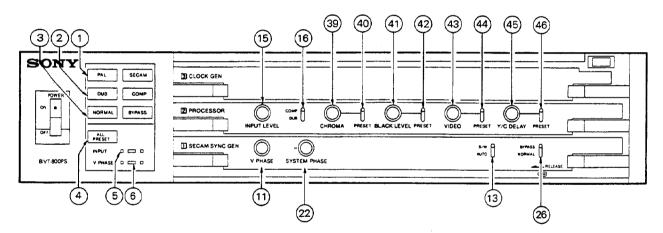
BVT-800PS 2-7

2-9. SWITCH AND CONTROL SETTING

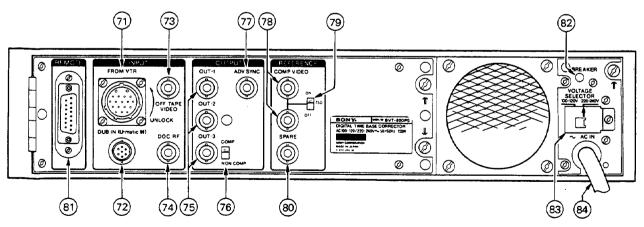
FRONT PANEL: for PAL model



FRONT PANEL: for SECAM model



REAR PANEL



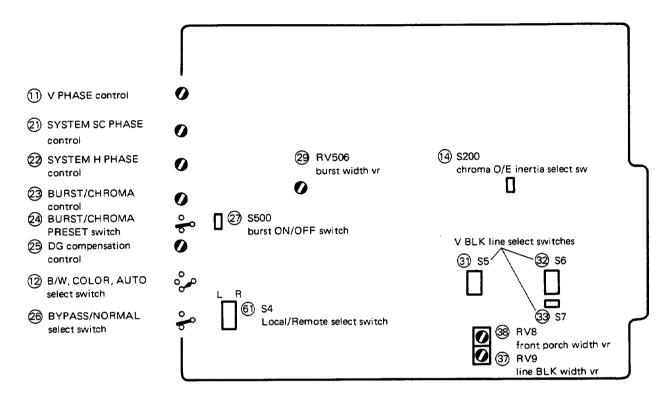
Note: The functions of each switch/control are described in the following sections.

1 to 6: section 2-9-1. Indicator Panel

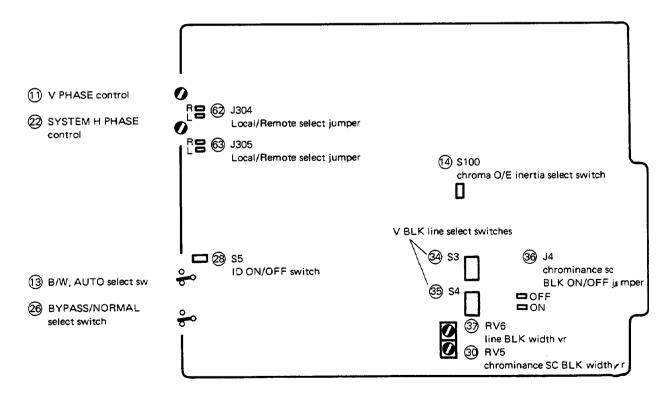
1) to 7: section 2-9-2. For Video Input Signal 2) to 49: section 2-9-3. For Video Output Signal

61 to 64: section 2-9-4. For Remote Control 71 to 84: section 2-9-5. Connector Panel

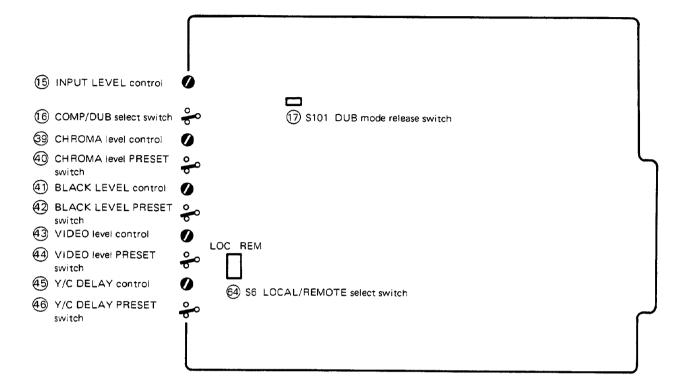
1 PAL SYNC GEN board (SG-67 board: for PAL)



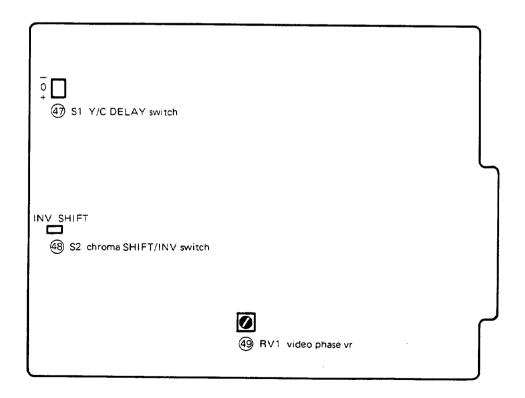
1 SECAM SYNC GEN board (SG-68 board: for SECAM)



2 PROCESSOR board (PR-40 board)



3 CLOCK GEN board (CK-11 board)



2-9-1. Indicator Panel

1 PAL/SECAM indicators

PAL or SECAM indicator lights according to the sync generator board SG-67 (for PAL)/SG-68 (for SECAM).

2 DUB/COMP indicators

DUB or COMP indicator lights according to the TBC operating mode DUB/COMP. See (16) COMP/DUB select switch.

(3) NORMAL/BYPASS indicators

NORMAL or BYPASS indicator lights according to the position of 26 BYPASS/NORMAL select switch.

4 ALL PRESET indicator

This indicator lights when the following switches on the BVT-800PS are all set to PRESET position.

- 24) BURST CHROMA PRESET switch (for PAL)
- (40) CHROMA level PRESET switch
- (42) BLACK LEVEL PRESET switch
- (44) VIDEO level PRESET switch
- (46) Y/C DELAY PRESET switch

Note: When BVT-800PS is remote-controlled, this indicator has no relation to the manual/preset mode of the remote controller.

(5) INPUT indicators

These indicators show the level of the off tape video input signal. See (15) INPUT LEVEL control.

(6) V PHASE indicators

These indicators show whether the off tape video input signal is in advance of the reference signal correctly or not. See (1) V PHASE control.

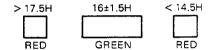
2-9-2. For Video Input Signal

- 1 PAL SYNC GEN board (SG-67 board: for PAL)
- 1 SECAM SYNC GEN board (SG-68 board: for SECAM)

(11) V PHASE control

When the VTR is in the normal playback mode, this adjusts the off tape video signal so that it is in advance of the reference signal by 16H.

6 V PHASE indicators show whether the off tape video signal is in advance by 16H or not. The green lamp indicates the correct phase.



Note: When the VTR is in E-E mode, the off tape video signal and the reference signal become in phase; the red lamp indicating 'less than 14.5H' lights.

(12) B/W, COLOR, AUTO select switch (for PAL)

The TBC operates in the color or black & white mode depending on the combination of the off tape video signal contents and this switch. Normally set to AUTO.

B/W: Regardless of whether the input signal is color or B/W, the TBC takes it as a B/W signal.

However, if this switch is set at B/W when the input video signal is color and the TBC is in COMP mode (i.e. not DUB mode: Refer to 6 COMP/DUB select switch.) the color of TBC output becomes free.

If this switch is set at B/W when the TBC is in DUB mode, the TBC output has no chrominance signal regardless of whether the input signal is color or B/W. See the note.

COLOR: Regardless of whether the input signal is color or B/W, the TBC takes it as a color signal.

AUTO: The TBC decides automatically color or B/W depending on the input signal burst level. The signal is judged to be B/W if its burst level is below the reference level (300 mV) by 12+/-3 dB.

(To be continued)

(12 B/W AUTO, COLOR select switch: for PAL)

Note: The TBC out burst can be controlled ON/OFF by 27 S500 burst ON/OFF switch on SG-67 board. It is set to OFF when shipped from the factory. When the tape speed of the VTR is $\pm -\pm$ 0 or more, BVT-800PS takes the video signal as a B/W signal regardless of other conditions. 27 S500 on the SG-67 board is active in this case also.

tape speed of VTR	video input	12) B/W COLOR AUTO switch	DUB COMP mode	burst ON/OFF switch	TBC output	
	B/W (Y)	B/W or AUTO	×	OFF	B/W without burst	
	color (Y+C+B)	B/W	DUB	OFF	(Y)	
	B/W (Y)	×	×	ON		
<±x5	B/W (Y)	color	×	OFF	B/W with burst (Y+B)	
	color (Y+C+B)	B/W	DUB	ON		
	color (Y+C+B)	COLOR or AUTO	х	х	color with burst (Y+C+B)	
	color (Y+C+B)	B/W	СОМР	OFF	B/W without burst (*) (Y+C)	
	color (Y+C+B)	B/W	СОМР	ON	color with burst (*) (Y+C+B)	
>E	х	×	×	OFF	B/W without burst (Y)	
≧±x5	х	×	×	ON	B/W with burst (Y+B)	

Y: luminance signal

B: burst signal

C: chrominance signal

X: irrelevant

^(*) The phase of the chrominance signal becomes free. Not applicable.

(13) B/W, AUTO select switch (for SECAM)

The TBC operates in the color or black & white mode depending on the combination of the off tape video signal contents and this switch. Normally set to AUTO.

B/W: Regardless of whether the input signal is color or B/W, the TBC takes it as a B/W signal.

However, if this switch is set at B/W when the input video signal is color and the TBC is in COMP mode (i.e. not DUB mode: Refer to 16 COMP/DUB select switch.), the color of TBC output becomes free.

If this switch is set at B/W when the TBC is in DUB mode, the TBC output has no chrominance signal regardless of whether the input signal is color or B/W. See the note.

AUTO: The TBC decides automatically color or B/W depending on the input signal line burst level.

Note: The TBC out ID signal can be controlled ON/OFF by 28 S5 ID ON/OFF switch on SG-68 board. It is set to ON when shipped from the factory. The blanking of TBC out chrominance SC signal on lines 7 (320) to 22 (335) can be controlled ON/OFF by 36 J4 chrominance SC blanking ON/OFF jumper. It is set to OFF when shipped from the factory.

When the tape speed of the VTR is $\pm/-x5$ or more, BVT-800PS takes the video signal as a B/W signal regardless of other conditions. 28 S5 ID ON/OFF switch is inactive in this case.

tape speed of VTR	video input	(3) B/W AUTO switch	DUB COMP mode	28) ID ON/OFF switch	36 chrominance SC BLK ON/OFF jumper	TBC output
<±x5 (Y	B/W (Y)	×	×	×	×	B/W (Y)
	color (Y+C+ID)	B/W	DUB	×	×	
	color (Y+C+ID)	B/W	СОМР	×	×	color without ID (*1) (Y+C)
	color (Y+C+ID)	AUTO	x	OFF	ON	color without ID (Y+C)
	color (Y+C+ID)	AUTO	х	OFF	OFF	color with ID (*2) (Y+C+ID)
	color (Y+C+ID)	AUTO	х	ON	×	color with ID (*3) (Y+C+ID)
≧±x5	х	×	x	×	×	B/W (Y)

Y: luminance signal

ID: ID signal

C: chrominance signal

X: irrelevant

- (*1) The color becomes free. Not applicable.
- (*2) The TBC output ID signal is not replaced in the TBC. The ID signal of the input ID signal is utilized.
- (*3) The TBC output ID signal is replaced with the new one that is generated in the TBC.

- 14 S200: chroma O/E inertia select switch (for PAL)
- 14 S100: chroma O/E inertia select switch (for SECAM) BVT-800PS judges the video input chrominance signal odd/even (135°/225° for PAL, DR'/DB' for SECAM) by detecting the burst. When missing the burst signal due to dropouts and bad head-to-tape touch, BVT-800PS keeps the last O/E data. If the kept O/E data is different from the new O/E data that is detected from the burst signal which appears again, BVT-800PS utilizes the new data after 16 lines when \$200/100 is OFF or after 32 lines when \$200/100 is ON.

When the VTR is in BIDIREX mode (i.e. playback by R/P head excepting FWDx1 speed), the TBC operates in "32 lines" regardless of S200/100 ON/OFF.

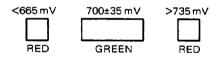
S200/100 is set at OFF when shipped from the factory.

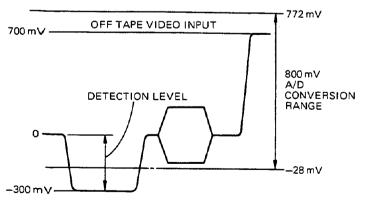
2 PROCESSOR board (PR-40 board)

15 INPUT LEVEL control

Controls the level of the video input signal. The adjusting range is $\pm 1/3$ dB.

The adjusted level is shown on (5) INPUT indicators. The green lamp lights when the level is correct. The indicators show the level of the sync signal portion of the off tape video input as the level of the off tape video signal. In other words, they indicate a sync signal level 300 mV as an off tape video input level 700 mV (without sync).





(6) COMP/DUB select switch

(17) S101: DUB mode release switch

In the DUB mode, the TBC processes signals without Y/C-separation, while in the COMP mode, signals are Y/C-separated in the TBC. The DUB mode produces a better picture than the COMP mode.

When the VTR with 18-pin multiple cable for example BVU-800/820P/S is connected to BVT-800PS, the DUB or COMP mode is selected by the mode of the VTR and two switches (6) and (7) as the following table. The DUB mode release switch is set to ON when shipped from the factory.

mode of VTR	16 COMP/DUB switch	17 DUB mode release sw	mode of BVT-800PS
SECAM	DUB	ON	DUB
or PAL normal play	СОМР	ON	DUB
	DUB	OFF	DUB
	COMP	OFF	СОМР
PAL DT play or PAL simultaneous play in recording	irrelevant	irrelevant	СОМР

When Sony BVU-200P or 200S is connected with 7-pin VDC cable, the DUB mode should be selected by the COMP/DUB select switch.

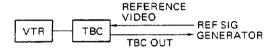
When the VTR is except the above-mentioned type, even though it is equipped with a DUB OUT connector, the off tape video signal must be inputted to BVT-800PS BNC connector and the COMP mode must be selected by the COMP/DUB select switch.

2 DUB or COMP indicator lights according to the DUB or COMP mode.

2-9-3. For Video Output Signal

- 1 PAL SYNC GEN board (SG-67 board: for PAL)
- 1 SECAM SYNC GEN board (SG-68 board: for SECAM)
- 21 SYSTEM SC PHASE control (for PAL)
- 22 SYSTEM H PHASE control

These two controls are used for correcting the delay of sync and SC (burst) due to the cable between the reference signal generator and the TBC. It is used, for example, when it is required to equalize the TBC output sync and SC (burst) phase to the reference signal phase by sending the TBC output back to the reference signal generator.



SYSTEM H PHASE can be adjusted in the range of -1 to $+3 \,\mu s$. SYSTEM SC PHASE control has the adjustable range of 360° so as to be able to adjust any phase to the reference. The SYSTEM SC PHASE control does not affect the H PHASE.

- 23 BURST/CHROMA control (for PAL)
- 24 BURST/CHROMA PRESET switch (for PAL)

manual: The output signal chroma phase against the burst signal is adjustable by the BURST/CHROMA control within the range of ± 1.0 °. The phase relationship between the reference video signal burst and the TBC output signal burst is not affected by rotating the BURST/CHROMA control.

PRESET: Irrespective of the BURST/CHROMA control position, the output signal chroma phase against the burst signal becomes identical to the one of the video input signal.

(25) DG compensation control (for PAL)

The TBC output DG can be compensated by this control within the range of $\pm -20\%$. DG compensation is 0 in the mechanical center.

26 BYPASS/NORMAL select switch

BYPASS: The bypassed output appears at the TBC output and 3 BYPASS indicator lights. When the 7-pin VDC cable is connected, the off tape video signal for the bypassed output is fed from the OFF TAPE VIDEO IN BNC connector.

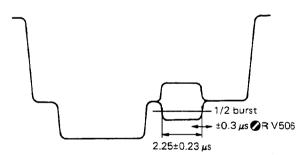
In the BYPASS mode, the sync signal of VIDEO OUT 3 is not controlled ON/OFF by (76) COMP/NON COMP select switch.

When the TBC power is OFF, the BYPASS output goes off too.

NORMAL: The time base corrected output with the shaped sync and burst signals appears at TBC output and (3) NORMAL indicator lights.

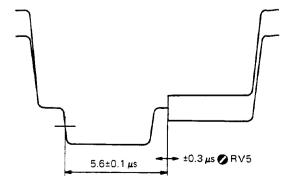
- 27 S500: burst ON/OFF switch (for PAL)
 See 12 B/W, COLOR, AUTO select switch.
- 28 S5: ID ON/OFF switch (for SECAM) See (13) B/W, AUTO select switch.
- 29 RV506: burst width vr (for PAL)

The TBC output signal burst width is varied approximately $\pm -0.3 \,\mu$ s by this vr. The burst width is set to $2.25 \pm -0.23 \,\mu$ s when shipped from the factory.



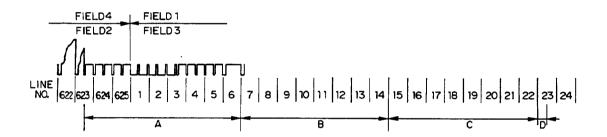
30 RV5: chrominance SC BLKG width vr (for SECAM)

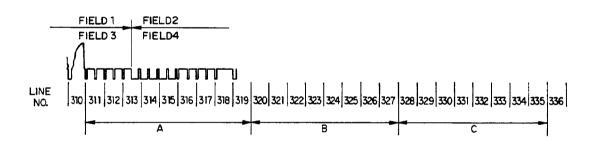
The chrominance signal blanking width of the TBC output can be varied approximately $\pm -0.3 \,\mu$ s. The blanking width is set to $5.6 \pm -0.1 \,\mu$ s when shipped from the factory.



3) S5: 3) S6: 3) S7: V blanking line select switches (for PAL)

The blanking of any line up to lines 7(320) - 23(335) of the TBC output signal can be turned ON/OFF.



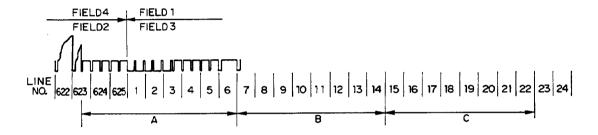


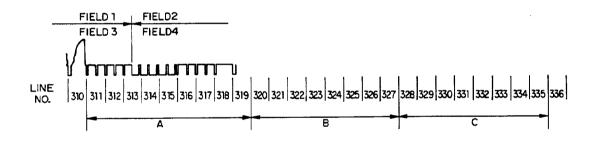
- A: Having no connection with switches S5, S6 and S7, blanking is always performed.
- B: Blanking of any line is turned ON/OFF by S5.
- C: Blanking of any line is turned ON/OFF by S6.
- D: Blanking is turned ON/OFF by S7.

These switches are all set ON when shipped from the factory.

34 S3: V blanking line select switches (for SECAM)

The blanking of any line up to lines 7 to 22 (320 to 335) of the TBC output signal can be turned ON/OFF. However, when ID signal is added on lines 7 to 15 (320 to 328) by setting ②8 S5: ID ON/OFF switch to ON (Refer to ③3 B/W, AUTO select switch.), the blanking of lines 16 to 22 (329 to 335) only can be turned ON/OFF. When the BVT-800PS operates in B/W mode and ②8 S5: ID ON/OFF switch is set to ON, lines 7 to 22 (320 to 335) are blanked regardless of S3 and S4.





A: Having no connection with switches S3 and S4, blanking is always performed.

B, C:

operating mode of BVT-800PS (color or B/W)	28 ID ON/OFF switch	lines to be blanked	
irrelevant	OFF	lines 7 to 22 (320 to 335): depends on 34 S3 and 35 S4	
color	ON	lines 16 to 22 (329 to 335): depends on (35) S4 only	
B/W	ON	lines 7 to 22 (320 to 335): irrelevant to 34 S3 and 35 S4	

S3, S4 and S5 are all set ON when shipped from the factory.

36 J4: chrominance SC blanking ON/OFF jumper (for SECAM)

Only the SECAM chrominance SC signal of the TBC output can be blanked from the line 7(320) to 22(335) by this jumper. See (13) B/W, AUTO select switch. J4 is set OFF when shipped from the factory.



OFF: When the off tape video input signal has a chrominance SC on the lines 7(320) to 22(335), the chrominance SC appears on the lines of the BVT-800PS video output signal.

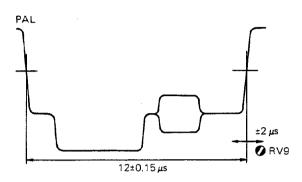
When the off tape video input signal has no chrominance SC on the lines, the unmodulated SC produced in BVT-800PS is added on the lines of the BVT-800PS video output signal. In this case, if (28) S5 ID ON/OFF switch is set to ON, the ID signal is added on the lines 7(320) to 15(328).

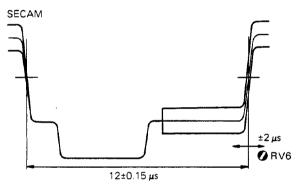
ON: Irrespective of whether the off tape video signal has a chrominance signal on the lines 7(320) to 22(335) or not, the BVT-800PS video output signal has no chrominance signal on the lines. However, if (28) S5 ID ON/OFF switch is set to ON, the ID signal produced in BVT-800PS is added on the lines 7(320) to 15(328).

Note: The luminance signal is not blanked by 36 J4. When utilizing a VITC signal, set 36 J4 to ON.

(37) RV9 (for PAL): line blanking width vr

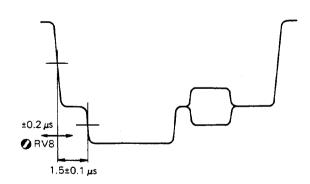
The line blanking width of the TBC output signal can be varied approximately $\pm 1/-2 \mu s$.





38 RV8: front porch width vr (for PAL)

The front porch width of the TBC output signal can be varied approximately $+/-0.2 \mu s$.



- 2 PROCESSOR board (PR-40 board)
- (39) CHROMA level control
- 40 CHROMA level PRESET switch

manual: The output signal chroma level is adjustable by the CHROMA level control within the range of ± -3 dB.

When BVT-800PS is a PAL model, be careful not to saturate the chrominance signal of the video output. If the off tape video input is a 100% color-bar signal, the BVT-800PS video output chrominance signal is saturated at +3 dB. The "+3 dB" means the total amount varied by 25 DG compensation, 39 CHROMA level and 43 VIDEO level controls.

When BVT-800PS is a SECAM model, be careful not to overmodulate the FM signal.

PRESET: Irrespective of the CHROMA level control position, the output signal chroma level becomes identical to the input chroma level.

- (41) BLACK LEVEL control
- (42) BLACK LEVEL PRESET switch

manual: The output signal black level is adjustable by the BLACK LEVEL control within the range from 0 to 100 mV against the input signal.

PRESET: Irrespective of the BLACK LEVEL control position, the output signal black level becomes identical to the input signal black level.

- 43 VIDEO level control
- 44 VIDEO level PRESET switch

manual: The output signal video level (luminance signal and chrominance signal for PAL, luminance signal only for SECAM) is adjustable by the VIDEO level control within the range of ± 1.3 dB.

The sync signal level is constant at 300 mV regardless of the VIDEO level control.

PRESET: Irrespective of the VIDEO level control position, the output signal video level becomes identical to the input signal video level. The sync signal level is constant at 300 mV.

- 45) Y/C DELAY control
- 46 Y/C DELAY PRESET switch

manual: The video output chrominance signal phase against the luminance signal can be varied by the Y/C DELAY control within the range of \pm 150 ns. The adjustable range can be shifted by 47 S1 Y/C DELAY switch on CLOCK GEN board. See the following table.

PRESET: The Y/C delay control becomes inactive but 47 S1 is active in this case also.

Y/C DELAY PRESET switch switch		chrominance signal phase against luminance signal	
manual	+	+180 ± 150 ns	adjustable
	0	0 ± 150 ns	by (45) Y/C
	_	-180 ± 150 ns	control
PRESET	+	+180 ns	
	0	0 ns	
	-	–180 ns	

- +: Chrominance signal is advanced.
- The output chrominance signal phase against the luminance signal is identical to the input signal.
- -: Chrominance signal is delayed.
 - 47 Y/C DELAY switch is set at 0 position when shipped from the factory.
- 3 CLOCK GEN board (CK-11 board)
- (47) S1: Y/C DELAY switch See (45) Y/C DELAY control.

48 S2: chroma SHIFT/INVert switch (for PAL)

When the PAL video input chrominance signal odd/ even (135°/225°) does not coincide with one of the reference signal, the input chrominance signal is shifted one line or inverted in the TBC to coincide with the reference signal.

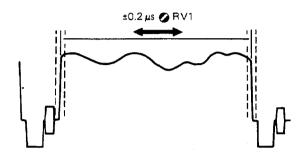
In BVT-800PS (PAL), when the VTR is in the normal playback mode (i.e. FWDx1 speed playback by R/P head), the input signal odd/even coincides with the reference signal by inversion regardless of this switch. When the VTR is in BIDIREX or DT play mode (i.e. playback by R/P head excepting FWDx1 speed or playback by DT head), inversion or one line shift is selectable by this switch. It is set to SHIFT position when shipped from the factory.

This switch does not affect the operation of BVT-800PS SECAM model.

(49) RV1: video phase vr

The video phase of the TBC output signal can be continuously varied $\pm 0.2 \,\mu s$.

It is set to coincide with the bypass output video phase when shipped from the factory.



2-9-4. For Remote Control

The following functions can be remote-controlled from Sony BK-2007 Remote Control Unit.

VIDEO level control & manual/PRESET select CHROMA level control & manual/PRESET select BLACK LEVEL control & manual/PRESET select *BURST/CHROMA control & manual/PRESET select SYSTEM H (SYNC) PHASE control

- *SYSTEM SC PHASE control
 - *: for PAL only

Note 1. Take notice that the ALL PRESET indicator on the BVT-800PS has no relation to the setting of the remote controller.

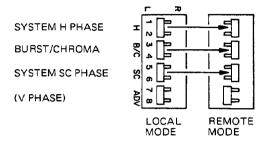
Note 2. The above controls and manual/PRESET switches can be controlled from BK-2007 by setting the following switches in BVT-800PS to REMOTE position.

Note 3. V PHASE cannot be controlled from BK-2007 but its LOCAL/REMOTE is selectable by (a) S4 (PAL) or (b) J304 (SECAM). If you make a remote controller that is different from BK-2007, you can control V PHASE from the remote controller and also indicate V PHASE on the controller.

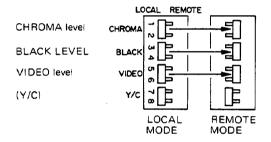
- 61 S4: Local/Remote select switch (for PAL)
 (11 PAL SYNC GEN board)
- J304: Local/Remote select jumper (for SECAM)J305: Local/Remote select jumper (for SECAM)
 - (SECAM SYNC GEN board)
- 64 S6: LOCAL/REMOTE select switch
 (2 PROCESSOR board)

for PAL

(61) S4 (11 PAL SYNC GEN board)



64 S6 (2 PROCESSOR board)

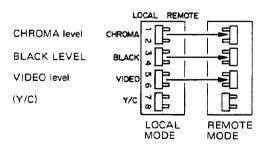


for SECAM

(3) J305 (1) SECAM SYNC GEN board)
Pull out the jumper plug from the socket L and plug in the socket R.



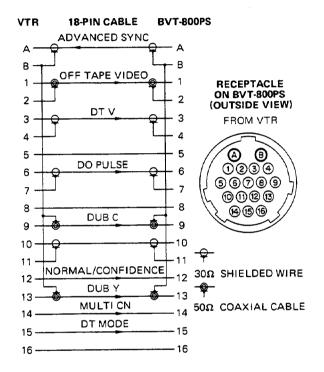
64 S6 (2 PROCESSOR board)



2-9-5. Connector Panel

(71) FROM VTR connector (18-pin, male)

Used when connecting a BVU-800/820 series VTR equipped with 18-pin TBC connector. Use the 18-pin cable (3 m) supplied with BVT-800PS. Do not use other cable.



BVT-800PS output signal

ADVANCED SYNC

 $2.2\,Vp\hbox{-}p$ +/- $0.3\,Vp\hbox{-}p$ 600 ohm

composite

negative polarity

The phase is in advance of the reference signal by 16H and +/-1.5H adjusted by 10 V PHASE control. In the confidence mode (simultaneous playback), the phase is not guaranteed.

BVT-800PS input signal

OFF TAPE VIDEO

1 Vp-p 50 ohm +/- 3 dB adjustable sync negative

DUB Y

off tape luminance signal 0.5 Vp-p (sync tip to 100% white) 75 ohm +/- 3 dB adjustable sync negative

DUB C

off tape chrominance signal (down converted by U-matic H VTR)

0.5 Vp-p (75% color-bar) 75 ohm

When the pin 14 "MULTI CN" is grounded at the VTR, BVT-800PS gives priority automatically to OFF TAPE VIDEO, DUB Y and DUB C signals over BNC OFF TAPE VIDEO input. Refer to 16 COMP/DUB select switch. The pin 1 OFF TAPE VIDEO signal is used for BYPASS video only.

DT V

TTL level, falling edge reference.

DO PULSE

TTL level, dropout: LOW

When the 18-pin multiple cable is used, the BNC "DOC RF" signal is not needed.

NORMAL/CONFIDENCE

TTL level

confidence mode (simultaneous playback): low

MULTI CN

grounded at VTR.

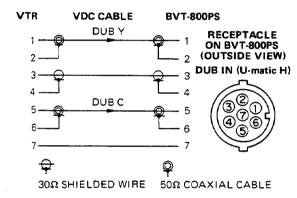
DT MODE

TTL level, DT mode: LOW

72) DUB IN (U-matic H) connector (7-pin, male)

Connector between a BVU-200 series VTR equipped 7-pin DUB OUT connector and BVT-800PS. Use the VDC cable supplied with the VTR. When connected by this cable, the DUB mode gives a better picture than the COMP mode. Refer to 16 COMP/DUB switch. When the VTR and the TBC are connected by 18-pin cable, the connection by VDC cable is not needed.

When the VTR is neither BVU-200 series nor BVU-800/820 series, even though it is equipped with a DUB OUT connector, it must not connected to BVT-800PS with VDC cable. Its off tape video signal must be inputted to BNC OFF TAPE VIDEO IN connector and the COMP mode must be selected by 16 COMP/DUB switch.



DUB Y input

off tape luminance signal 0.5 Vp-p (sync tip to 100% white) 75 ohm +/- 3 dB adjustable sync negative

DUB C input

off tape chrominance signal (down converted by U-matic H VTR)

0.5 Vp-p (75% color-bar) 75 ohm

(73) OFF TAPE VIDEO IN connector (BNC connector)

1 Vp-p 75 ohm

+/- 3 dB adjustable

sync negative

Connector for inputting the VTR's video output.

When the VTR is neither BVU-200 series nor BVU-800/820 series, even though it is equipped with DUB OUT connector, its off tape video signal must be inputted to this BNC connector and it must not be connected by VDC cable. In this case, (6) COMP/DUB select switch must be set to COMP.

When the 7-pin VDC cable is connected to the DUB IN connector, the off tape video signal (DUB Y and DUB C signals) is fed from the DUB IN connector and (6) COMP/DUB select switch should be set to DUB. In this case, the OFF TAPE VIDEO IN signal from the BNC connector is used for BYPASS video.

When the 18-pin multiple cable is connected, the off tape video signal from the multiple cable is given priority.

74) DOC RF IN connector (BNC connector)

0.5 Vp-p +/- 6 dB 75 ohm

Connector for inputting the off tape RF signal to detect a dropout. Connected to the OFF TAPE RF connector of the VTR. When the 18-pin multiple cable is used, the "DOC RF" signal is not needed.

75 VIDEO OUT 1, 2, 3 connectors (BNC connector)

76 COMP/NON COMP switch

1 Vp-p 75 ohm

sync negative

VIDEO OUT connector on TBC. Sync signal of VIDEO OUT 3 is ON/OFF controlled by the COMP/NON COMP switch, however, in the BYPASS mode, the composite signal is always outputted.

77 ADV SYNC OUT connector (BNC connector)

2.2 Vp-p +/- 0.3 Vp-p 75 ohm composite

negative polarity

This is the sync signal connector for transmitting to the VTR from the TBC advanced by 16H more than the reference signal. The "ADV SYNC" phase is in advance of the reference signal by 16H and +/- 8H adjusted by 11 V PHASE control. In the confidence mode (simultaneous playback), the phase is not guaranteed.

Connect to the SYNC IN or VIDEO IN connector on the VTR. When an 18-pin multiple cable is used, the connection by the BNC connector is not needed.

78 REFERENCE COMP VIDEO IN/OUT connector (BNC connector)

79 75 ohm ON/OFF switch

composite video or black burst signal

1 Vp-p +/- 3 dB 75 ohm

(sync: 300 mV +/- 3 dB, burst: 300 mV +/- 3 dB)

sync negative

TBC reference signal input connector. If no signal is inputted, the TBC operates with its internal reference signal.

When looping, switch to 75 ohm OFF and when terminating, switch to 75 ohm ON.

80 SPARE connector (BNC connector)

It is not wired to the inside circuit. Use it when necessary to the modification.

(81) REMOTE connector (D-sub 15-pin, male)

REMOTE

14 -

15 •

Connector to remote-control the BVT-800PS from Sony Remote Control Unit BK-2007. Use the 15 conductors ribbon cable (2 m) supplied with BK-2007. Local or Remote mode is selected by the switches on

Local or Remote mode is selected by the switches on the circuit board. Refer to section 2-9-4. For Remote Control.

BVT-800PS

CONTROLLER SYSTEM H PHASE CONTROL BURST/CHROMA CONTROL (*1) SYSTEM SC PHASE CONTROL (*1) 3 RECEPTACLE VIDEO LEVEL CONTROL ON BYT-800PS BLACK LEVEL CONTROL (OUTSIDE VIEW) CHROMA LEVEL CONTROL REMOTE -12 V7 GND 8 GND +5 V (*4) 10 10 -ADV 1 (*3) 11 11 -ADV 2 (*3) 12 V PHASE CONTROL (*2)13 13

(*1) Applicable for PAL model only.

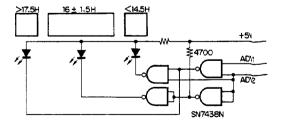
-5V

+12 V

(*2) BK-2007 has not V PHASE control function but if you make a remote controller different from BK-2007, this function becomes operative. Refer to the section 2-9-4. For Remote Control.

(*4)

(*3) BK-2007 cannot indicate V PHASE on it but if you make a remote controller different from BK-2007, these signals enable to indicate V PHASE on the remote controller as same as 6 V PHASE indicators on the BVT-800PS.



(*4) BK-2007 does not utilize ± -5 V directly. When making a remote controller, these ± -5 V may \approx convenient.

BVT-800PS 2-23

82 BREAKER

AC 250 V 1.6 A

When the current exceeds the rated value, the BREAK-ER button turns OFF and the circuit opens. Depressing the button again, it is reset.

83 VOLTAGE SELECTOR

When changing the line voltage, move this left or right in accordance with the power line voltage. See section 2-4. Power Requirements.

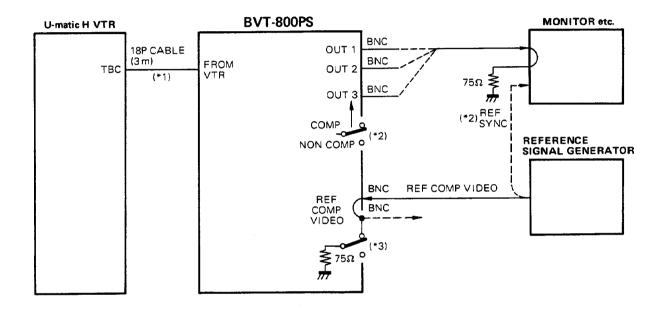
84) power cord

When shipped from the factory, no AC plug may be mounted. If not, prepare and mount a 3-pin plug. When mounting the plug to the power cord, be careful to the polarity. See section 2-4. Power Requirements.

2-24 BVT-800PS

2-10. CONNECTION EXAMPLES

Connection 1: U-matic H VTR with an 18-pin TBC connector (Ex. BVU-800P/S, BVU-820P/S)



(*1) 18-pin cable & COMP/DUB mode

When connected by an 18-pin cable, BVT-800PS operates in the DUB mode regardless of the COMP/DUB select switch position.

(*2) OUT 3, COMP/NON COMP switch & REF SYNC signal to the monitor etc.

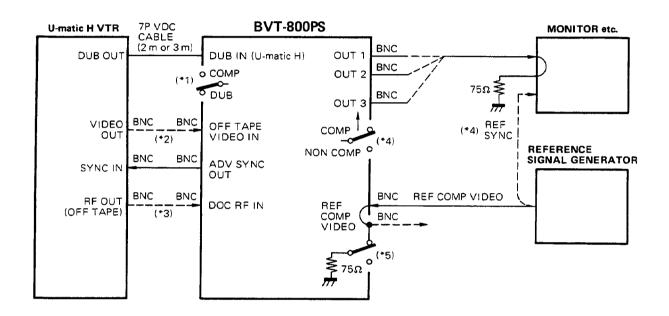
When the COMP/NON COMP switch is set to NON COMP, the OUT 3 has no sync signal and the reference sync input is needed for the monitor etc. In the BY-PASS mode, OUT 3 also outputs the composite signal.

(*3) REF COMP VIDEO & 75Ω switch

When looping the reference composite video signal (or black burst signal), set the 75 ohm switch to OFF and when terminating it, set it to ON. If no signal is inputted, the TBC operates with its internal reference signal.

Connection 2: U-matic H VTR with a 7-pin DUB OUT connector (Ex. BVU-200P/S)

Note: Not applicable to a regular U-matic VTR, even though it is equipped with a 7-pin DUB OUT connector. Refer to Connection 3 for the regular U-matic VTR.



(*1) COMP/DUB select switch

Set the switch to DUB.

(*2) OFF TAPE VIDEO IN

In the BYPASS mode, this signal is needed.

(*3) DOC RF IN

DOC in the TBC is impossible unless the off tape RF signal of the VTR is connected.

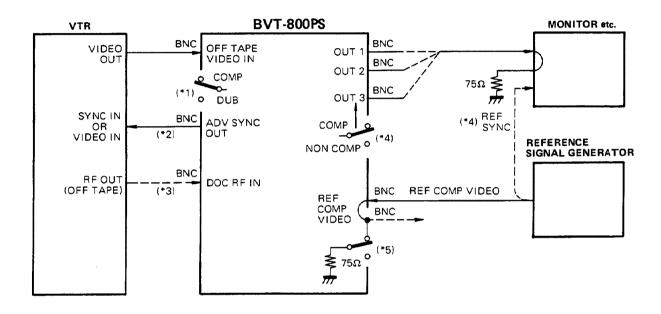
(*4) OUT 3, COMP/NON COMP switch & REF SYNC signal to the monitor etc.

When the COMP/NON COMP switch is set to NON COMP, the OUT 3 has no sync signal and the reference sync input is needed for the monitor etc. In the BY-PASS mode, OUT 3 also outputs the composite signal.

(*5) REF COMP VIDEO & 75Ω switch

When looping the reference composite video signal (or black burst signal), set the 75 ohm switch to OFF and when terminating it, set it to ON. If no signal is inputted, the TBC operates with its internal reference signal.

Connection 3: VTR equipped with a capstan servo



(*1) COMP/DUB select switch Set the switch to COMP.

(*2) ADV SYNC OUT

When the VTR has no SYNC IN connector, connect to the VIDEO IN connector.

(*3) DOC RF IN

DOC in the TBC is impossible unless the off tape RF signal of the VTR is connected.

(*4) OUT 3, COMP/NON COMP switch & REF SYNC signal to the monitor etc.

When the COMP/NON COMP switch is set to NON COMP, the OUT 3 has no sync signal and the reference sync input is needed for the monitor etc. In the BY-PASS mode, OUT 3 also outputs the composite signal.

(*5) REF COMP VIDEO & 75Ω switch

When looping the reference composite video signal (or black burst signal), set the 75 ohm switch to 0FF and when terminating it, set it to ON. If no signal is inputted, the TBC operates with its internal reference signal.

2-11. SPECIFICATIONS

GENERAL

Dimensions

424(w) x 88(h) x 515(d) mm

Weight

13 kg

Power Requirements

AC100-120/220-240 V selectable 100-120 V mode: AC90 to 132 V 220-240 V mode: AC198 to 264 V

48 to 62 Hz 100 W

Ambient Operating Conditions Temperature 0 to +40°C

Humidity

10 to 90% (noncondensing)

VIDEO

Band Width

DUB Mode

Y: 3.5 MHz +/- 0.4 dB

4.3 MHz -3 dB

C: +/- 0.75 MHz -3 dB for PAL +/- 0.5 MHz -3 dB for SECAM

COMP Mode Y: 2.5 MHz +/- 0.4 dB

3.25 MHz -3 dB

C: +/-0.7 MHz - 3 dB for PAL+/- 0.5 MHz -3 dB for SECAM

Signal-to-Noise Ratio

More than 55 dB

(peak-to-peak video to rms noise)

Differential Gain (for PAL)

2%

Differential Phase (for PAL)

2°

K Factor (2T Pulse)

DUB Mode 2%

COMP Mode 4%

Chrominance/Luminance Delay

l O ns

Correction Range 29 Hp-p

Residual Error

Color

+/-2.5 ns for PAL

+/- 15 ns for SECAM

B/W

+/- 15 ns

INPUT SIGNALS

Off Tape Video

1 Vp-p 75 ohm, +/- 3 dB adjustable,

sync negative

DOC RF

0.5 Vp-p +/-- 6 dB 75 ohm

Reference Composite Video

1 Vp-p +/- 3 dB 75 ohm,

sync negative

75 ohm ON/OFF, Looping is possible.

OUTPUT SIGNALS

Video Out 1, 2, 3 1 Vp-p 75 ohm, sync negative

Sync signal of VIDEO OUT 3 is controlled ON/OFF by the COMP/NON

COMP switch.

Advanced Sync 2.2 +/

2.2 +/- 0.3 Vp-p 75 ohm

negative polarity

OUTPUT CONTROLS

Video Level +/-3 dB (composite for PAL)

(luminance for SECAM)

Chroma Level

+/-3 dB

Black Level

0 to +0.1 V

Burst/Chroma Phase (for PAL)

 $+/-15^{\circ}$

DG Compensation (for PAL)

+/- 20%

System H Phase -1 to $+3 \mu_S$

System SC Phase (for PAL)

more than $\pm -180^{\circ}$

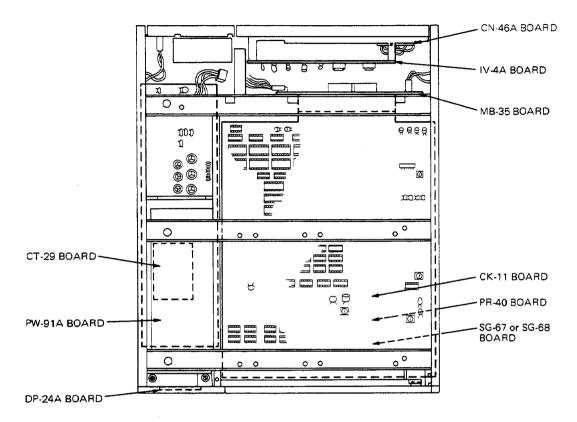
Y/C Delay

+/-150 ns

Note: For the "FROM VTR" and "DUB IN" multiple connector signals, see "Section 2-9-5 Connector Panel".

SECTION 3 SERVICE INFORMATION

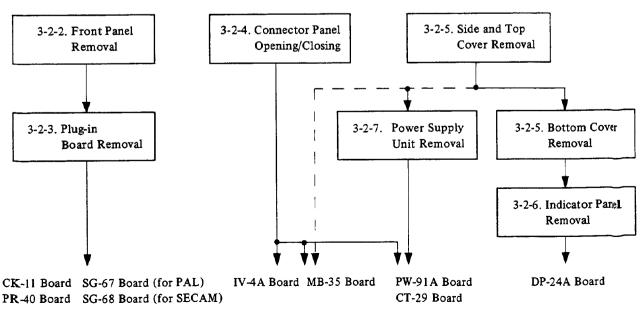
3-1. PRINTED CIRCUIT BOARD LOCATION



3-2, CABINET REMOVAL

3-2-1. Cabinet Removal Flowchart

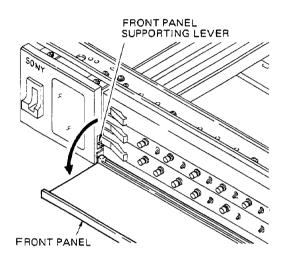
The following is the working procedure necessary for checking each printed circuit board. Process indicated by dotted lines is optional:



BVT-800PS 3-1

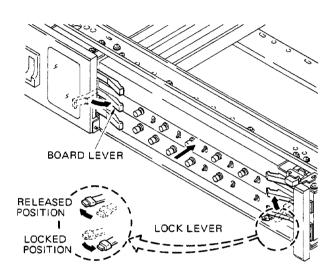
3-2-2. Front Panel Removal

Push the upper part of the front panel to open it and push it again to close it. The front panel is designed to be removable so that the equipment may be used without it. Push the front panel supporting lever using the finger or tip of a screwdriver to remove it.



Installation

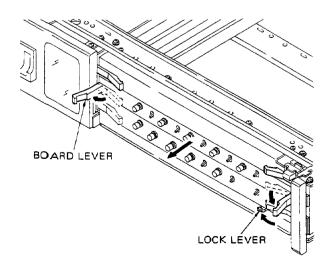
- (1) Leave the lock lever moved in the direction indicated.
- (2) Push in the boards leaving the board levers lifted and lay the levers inside when the boards are set.
- (3) Move the lock lever to the right.



3-2-3. Plug-in Board Removal

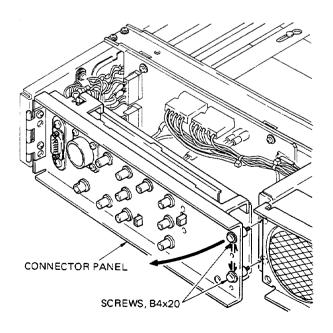
Removal

- (1) Move the lock lever in the direction indicated.
- (2) Lift both left and right board levers.
- (3) Pull out the boards.



3-2-4. Connector Panel Opening/Closing

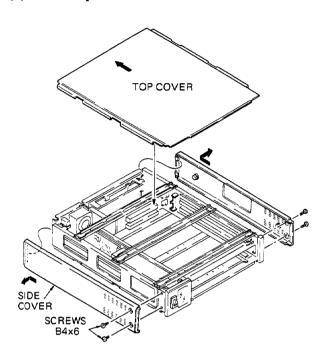
Loosen the two screws and open the connector panel as shown below.



3-2-5. Side, Top and Bottom Cover Removal

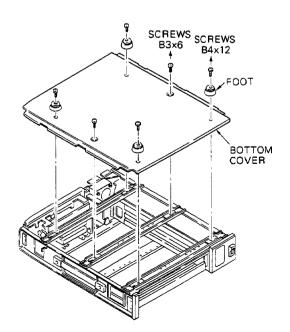
Side and Top Cover Removal

- (1) Remove the B4x6 screws (two on each side) and then remove side covers as shown below.
- (2) Pull the top cover in the direction indicated.



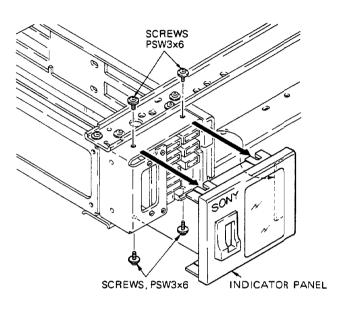
Bottom Cover Removal

(3) Remove the four feet and the two B3x6 screws.



3-2-6. Indicator Panel Removal

After removing top and bottom covers, remove the four PSW3x6 screws as shown below.

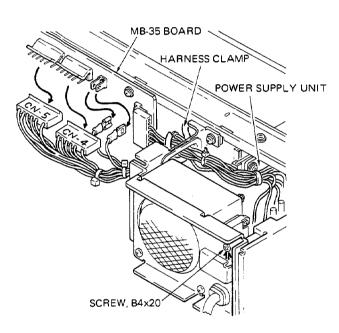


3-3

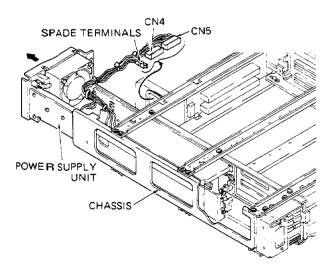
3-2-7. Power Supply Unit Removal

Open the connector panel and pull out the power supply unit following the procedure below:

- (1) Loosen the B4x20 screw.
- (2) Disconnect CN4, CN5 and the two spade terminals from the MB-35 board.
- (3) Loosen the harness clamp and push into the power supply unit.

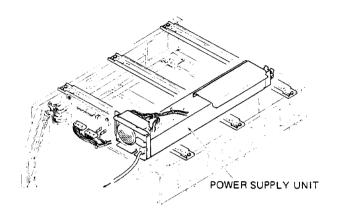


(4) Pull out the power supply unit in the direction indicated.



(5) Power supply unit checking method

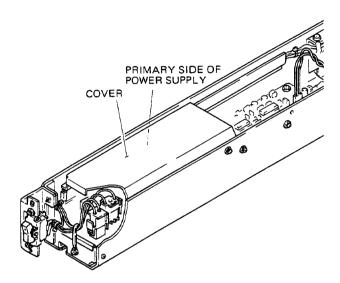
After removing the power supply unit, place it on the equipment and connect CN4, CN5 and spade terminals to the MB-35 board. Then switch on the power supply in this condition.



3-3. NOTES ON SERVICING

3-3-1. Notes on the Power Supply Unit

(1) Most of the circuits are in the primary side as this model's power supply is a switching regulator, so be careful to avoid electric shock. The primary is the area protected with a cover in the following figure.



- (2) There is a danger of shock even after switching off the power, due to remaining charge in the capacitors. Care is needed for about one minute after switching off.
- (3) Perform checks with CN4, CN5 and two spade terminals connected to MB-35 board as operation of the power supply unit with no load could damage it.
- (4) A breaker functions when the equipment is powered at $AC220-240\,V$ with its voltage selector set to $AC100-120\,V$.
- (5) The equipment does not operate if the input voltage is below the rated value, i.e., it will not operate at AC110-120 V with its power voltage selector set at AC220-240 V.
- (6) If the power supply stops generating during use due to abnormal conditions, it will not restart unless switched on again. One minute or more must be allowed for restarting.

3-3-2. Plug-in Board Lock Mechanism

This model is equipped with a lock mechanism to avoid detaching the plug-in boards. Move the lock lever to the left to release the boards and to the right to lock them. When loading or detaching a board, first unlock and then use the board levers. See Section 3-2-3 "Plug-in Board Removal".

3-3-3. Note on Square Fixed Inductor

The following square fixed inductor appears similar to variable inductors, but those mounted on the printed circuit boards and those in stock as the repair parts are all set at the factory and must not be re-adjusted in the field.

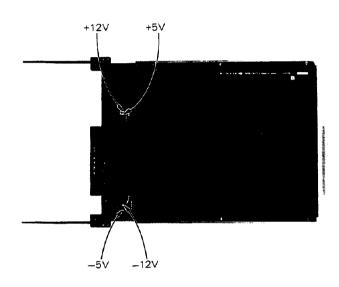


3-5

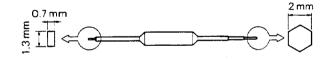
3-4. SERVICE TOOLS

Extension Board: EB-9A Sony Part No. A-6252-050-A Used for checking and repairing the plug-in boards. BVT-800PS has 1 pc as an accessory.

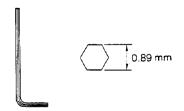
If the EB-9A extension board is inserted into the BVT-800PS, it is possible to check that $\pm 12 \, \text{V}$, $\pm 12 \, \text{V}$, $\pm 5 \, \text{V}$ and $\pm 5 \, \text{VDC}$ is being supplied by checking the illumination of the red LEDs on the extension board.



Adjusting Screwdriver Sony Part No. 7-700-733-01

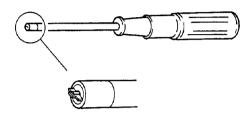


Hexagonal Wrench Sony Part No. 7-700-736-06



"TOTSU" Screwdriver

3 mm DIA Sony Part No. 7-721-050-63 4 mm DIA Sony Part No. 7-721-050-64

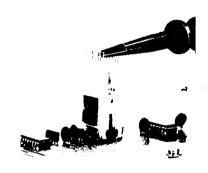


IC Test Clip

Type TC-16 Sony Part No. J-6041-770-A
Type TC-20 Sony Part No. J-6041-780-A
Manufacturer;

AP PRODUCTS INCORPORATED Box 697 72 Corwin Drive Painesville, Ohio 44077, USA TEL; 216-354-2101

When connecting the test probe to the terminal of DIP integrated circuit, these clips are convenient. Type TC-16 is for DIP 14-pin or 16-pin IC and Type TC-20 is for 18-pin or 20-pin IC.



3-5. NOTES ON REPAIR PARTS

(1) Safety Related Components Warning.

Components identified by shading marked with no the schematic diagrams, exploded views and electrical spare parts list are critical to safe operation. Replace these components with Sony parts whose part numbers appear in this manual or in service bulletins and service manual supplements published by Sony.

(2) Standardization of Parts

Repair parts supplied from Sony Parts Center may not be always identical with the parts which actually in use due to "accommodating the improved parts and/or engineering changes" or "standardization of genuine parts."

This manual's exploded views and electrical spare parts lists are indicating the part numbers of "the standardized genuine parts at present".

(3) Change of Parts

Regarding engineering parts changes, refer to Section E "CHANGED PARTS".

(4) Stock of Parts

Printed Components in Bold-Face type on the exploded views and electrical spare parts list are normally stocked for replacement purposes. The remaining parts are not normally required for routine service work. Orders for parts not shown in Bold-Face type will be processed, but allow for additional delivery time.

(5) Units for Capacitors, Inductors and Resistors

The following units are assumed in the schematic diagram and electrical parts list unless otherwise specified:

Capacitors: μ F Inductors: μ H Resistors: ohm

BYT-800PS 3-7



SECTION 4 THEORY OF OPERATION

4-1. OUTLINE OF BVT-800PS

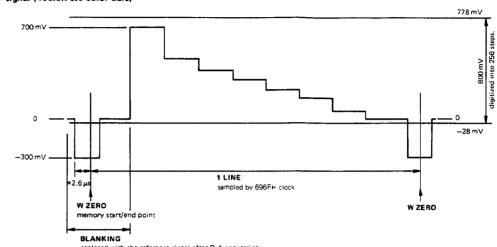
BVT-800PS is a TBC designed for SC low frequency conversion type PAL or SECAM VTR such as U-matic. It has a wide correction range of 29Hp-p, applicable to DT play and BIDIREX play also. The VTR must be able to V-lock to an external signal while playing back.

BVT-800PS for PAL and for SECAM consists of the common circuits except a sync generator circuit board. The sync generator board for PAL or SECAM is mounted in each BVT-800PS and these boards are available as options BKT-801 (for PAL) and BKT-802 (for SECAM).

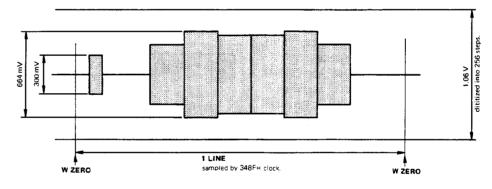
The off tape video signal is inputted to BVT-800PS by the two formats. One is a composite signal and the other is Y and C signals that are separated in the VTR. The SC frequency of the C signal is down converted in the U-matic H VTR. The process of the composite signal in the TBC is named COMP mode and the other is called DUB mode.

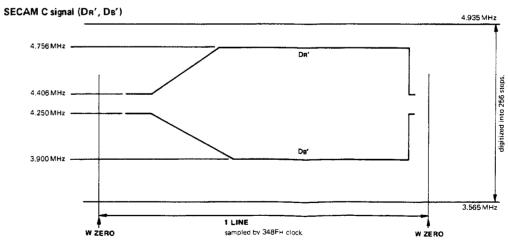
The off tape video signal is digitized into 256 steps (8 bits). The sampling frequency is 696FH for Y signal and 348FH for C signal.

Y signal (100.0.75.0 color bars)



PAL C signal (100.0.75.0 color bars)





4-1-1. Outline of BVT-800PS PAL

In the COMP mode, the Y signal of the off tape composite signal has a time-base error but the time-base error of the C signal is cancelled in the VTR when the SC is reconverted into PAL frequency. The composite signal is separated into Y and C signals in the TBC.

In the DUB mode, the Y and C signals which have the same time-base error are inputted to the TBC and the SC frequency of the C signal is down converted in the U-matic H VTR. Once the C signal is reconverted into PAL frequency in the TBC, the time-base error is cancelled and the C signal becomes equivalent to the C signal in the COMP mode.

Next, the C signal is frequency-converted into 1.36 MHz and given the same time-base error as that of the Y signal by the carrier that is formed from the horizontal sync signal.

The Y signal is sent to Y A-D converter and the 1.36 MHz C signal is sent to C A-D converter.

The Y signal is sampled by the 696FH clock (Y WRITE CLOCK) formed from the horizontal sync signal of the Y signal and converted into 8-bit binary code (256 steps). The digitized data are written into Y 32-line memory.

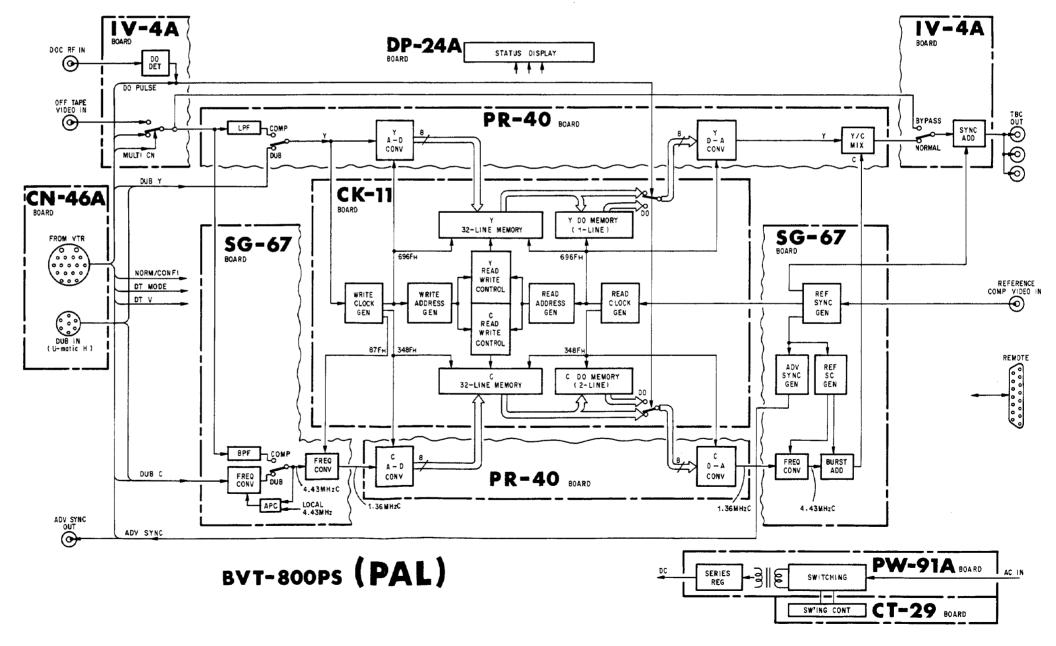
The 1.36 MHz C signal is sampled by the 348FH clock (C WRITE CLOCK) and converted into 8-bit binary code. The digital C signal is written into C 32-line memory.

The written data are then read out by READ CLOCK (Y: 696FH, C: 348FH) made from a reference signal which has no time-base error. They are sent to DOC (Drop-Out Compensator) and D-A converter.

Y DOC consists of a 1-line memory and C DOC consists of a 2-line memory. Normally the D-A converter input is the data read out from 32-line memory, but when a dropout occurs in the VTR, the affected part is replaced with the data read out from the DOC memory. Y DOC replaces the Y signal with the signal before 1H and C DOC replaces the C signal with the one before 2H.

The Y and C signals read out from each 32-line memory or DOC memory are reconverted into analog Y and 1.36 MHz C signals.

After D-A conversion, the frequency of the C signal is reconverted into 4.43 MHz by the carrier formed from the reference signal. A burst signal is added to the C signal and then the C signal is mixed with the Y signal. A sync signal is added to the mixed Y & C signal and the PAL composite signal is sent out as an output signal.



4-1-2. Outline of BVT-800PS SECAM

In the SECAM model, the Y signal is processed in the same way as the PAL model. The C signal is processed in the following way:

In the COMP mode, the off tape C signal is reconverted into the SECAM frequency in the VTR, but in the DUB mode, the C signal is converted into the low frequency in the U-matic H VTR. The down converted C signal is reconverted into the SECAM frequency in the TBC so that the C signal becomes equivalent to the COMP mode C signal. This C signal is demodulated to the color difference signal DR'/DB'.

The demodulated DR'/DB' signal is processed by A-D converter, 32-line memory, DOC and D-A converter and reconverted into DR'/DB' signal. These processes are same as PAL.

The reconverted DR'/DB' signal frequency-modulates the 4.406/4.250 MHz carrier and becomes a SECAM C signal. The SECAM C signal is mixed with the Y signal that is reconverted into analog signal. A sync signal is added to the mixed Y & C signal and the SECAM composite signal is sent out as an output signal.

4-2. OUTLINE OF PRINTED CIRCUIT BOARDS

Principal circuits of BVT-800PS are placed on the following three plug-in boards.

SG-67 (PAL) or SG-68 (SECAM) SYNC GENERATOR board

PR-40 PROCESSOR board

CK-11 CLOCK GENERATOR board

Apart from these, there are six other boards; IV-4A, DP-24A, CN-46A, PW-91A, CT-29 and the Mother-Board MB-35.

The SG-67 PAL SYNC GENERATOR board contains a reference sync generator and a heterodyne color circuit. The SG-68 SECAM SYNC GENERATOR board contains a reference sync generator and a color difference signal demodulator/modulator.

The PR-40 PROCESSOR board is A-D/D-A converters for Y and C signals.

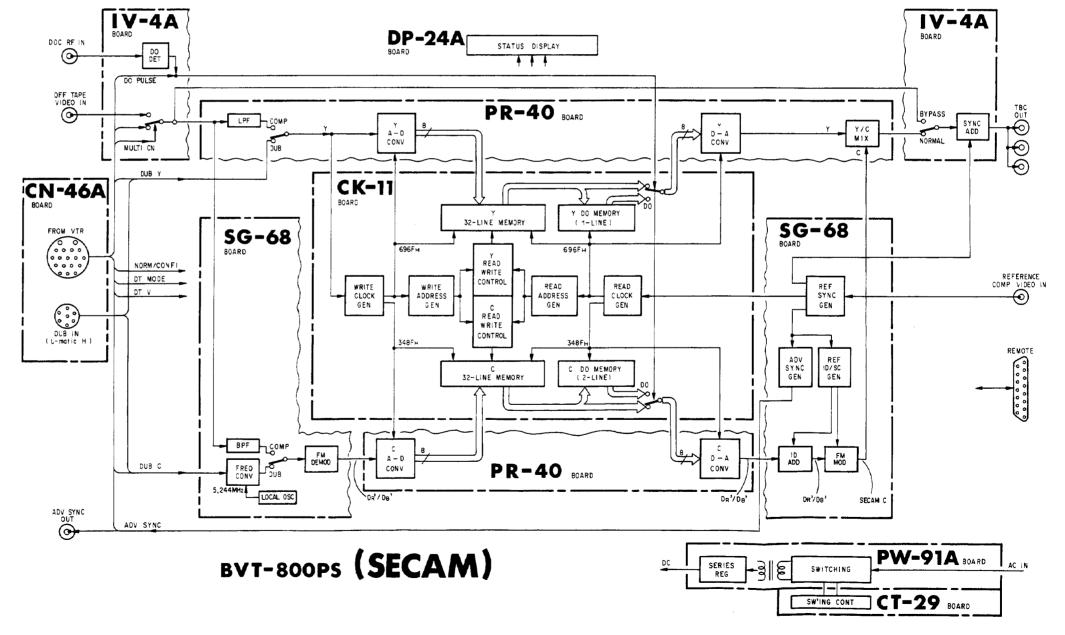
The CK-11 CLOCK GENERATOR board contains read and write clock generators, 32-line memories and DOCs for Y and C signals. The signals to control the timing of each part also are made on this board.

The IV-4A board contains the video signal input/output buffer and the dropout detection circuit. The output signal NORMAL/BYPASS switching and the addition of sync signal are performed on the IV-4A board.

The DP-24A board indicates the input level, PAL/SECAM mode, COMP/DUB mode, etc.

The CN-46A board is for 18-pin VTR connector and 7-pin DUB IN connector relay purpose.

The PW-91A board is a DC regulator; in this model, a switching regulator is used. The CT-29 board controls the PW-91A board switching.



BVT-800PS

SECTION 5 GENERAL INFORMATION FOR ALIGNMENT

5-1. INDEX OF ADJUSTMENT COMPONENTS

SG-67 Board Section	Section	SG-68 Board Section	Section
J2; Jumper Plug		CV100	
J3; Jumper Plug	. 16-2,16-3,	J3; D' _R /D' _B INT/EXT Select	
	16–6		g ON/OFF Jumper . 2-9-3,18-3
LV200		J104; NOR/ADJ Select Jumpe	
RV1; V PHASE Control	. 1-2-1,2-9-2,		Jumper 2-9-4,6-3
	6-3		Jumper 2-9-4,6-3
RV2; SYSTEM SC PHASE Control	. 1-2-1,2-9-3,	LV100	
	6-3	LV300	
RV3; SYSTEM H PHASE Control	. 1-2-1,2-9-3,	RV1; V PHASE Control	1-2-1, 2-9-2,
	6-3		6-3
RV4; BURST/CHROMA Control	. 1-2-1,2-9-3,	RV2; SYSTEM H PHASE Contro	1-2-1, 2-9-3,
	6–3		6-3,17-6
RV5; DG Compensation Control	. 1-2-1,2-9-3,	RV3	
	6-3	RV4	
RV6		RV5; Chrominance SC Blanki	ng Width Control. 2-9-3,6-3,
RV7			13-3
RV8; Front Porch Width Control		RV6; Line Blanking Width C	Control 2-9-3, 6-3,
	16-8	TT200 34.3	13-3
RV9; Line Blanking Width Control		RV100 14-2	RV302 17-4 RV303 17-6
	16-8	RV101 14-3 RV102 14-7	RV304 17-6
RV200 16–13 RV208		RV102 14-7 RV103 18-3	RV304 17-6
RV201 16-11 RV209		RV103 18-3	RV306 17-5
RV202 16-7 RV210		RV105 14-5	RV307 17-4
RV203 12-4 RV500		RV106 14-5	RV308 17-1
RV204 16-10 RV501 RV205 12-3 RV502		RV10714-6	RV310 17-9
		RV108 14-6	RV311 17-3
		RV300 17-6	RV312 17-7
RV507 16-12 RV504 RV506; Burst Width Adjustment Control		RV301 17-5	RV313 17-2
RV506; Burst width Adjustment Control	16-5		th 1-2-1, 2-9-2,
RV507			6–3
RV508		S2; BYPASS/NORMAL Select S	witch 1-2-1, 2-9-3,
S1; BURST/CHROMA PRESET Switch			6~3
DI, Dadi, aldii. Ilabi bulla i i i	6-3	S3; V Blanking Line Select	Switch 2-9-1, 6-3
S2; B/W, COLOR, AUTO Select Switch	. 1-2-1.2-9-2.		Switch 2-9-3, 6-3
D2/ 2/11/ 002014 1222 000000 0112211 0 0 0	6-3	S5; ID ON/OFF Switch	2-9-1, 17-4
S3; BYPASS/NORMAL Select Switch	. 1-2-1,2-9-3,		6–3
30, 200.20 100.00	6-3	S100; Chroma O/E Inertia S	Select Switch 2-9-1, 6-3
S4; Local/Remote Select Switch	. 2-9-4,6-3		
S5; V Blanking Line Select Switch			
S6; V Blanking Line Select Switch			
S7; V Blanking Line Select Switch			
S200; Chroma O/E Inertia Select Switch .			
S500; Burst ON/OFF Switch			

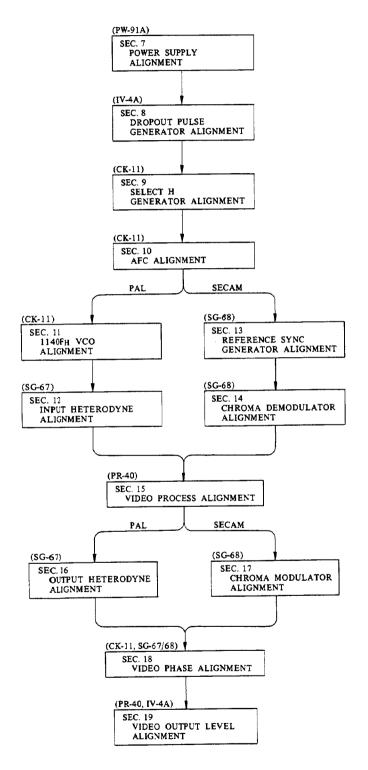
5-1

PR-40 Board Section	Section	PW-91A Board	
RV1; INPUT LEVEL Control .			RV111 7-1-3
ina, into invanced i	6-3,12-	.,	RV131 7-1-3
RV2; CHROMA Level Control .	•	•	RV131 7-1-3 RV132 7-1-2
, 	6-3	RV92 7-1-2	RV152 /-1-2 RV151 7-1-2
RV3; BLACK LEVEL Control .			RVIJI /-1-2
one of the second of the secon	6-3	CI-29 Board	
RV4; VIDEO Level Control .			
in i, vibbo botto control .	6-3	RV202 7-1-1	
RV5; Y/C DELAY Control			
ine, i, o billin concret	6-3	Connector Panel	
RV101 15-3	RV110 15-3		:
RV102 15-2	RV501 15-12	SWI; 75—OIM ON/OFF SW.	itch 1-2-2,2-9-5, 6-3
RV103 15-1	RV503 19-1	SENS . COMES VAICHT COMES CO.	o-s itch 1-2-2,2-9-5,
RV104 15-1	RV504 15-10	SH3, COMP/NON COMP SW.	
RV105 15-5	RV505 15-9		6–3
RV106 15-6	RV506 15-11		
RV107 15-7	RV507 15-8		
RV108 15-4	RV508 15-8		
RV109 15-7	RV509 19-1		
S1; COMP/DUB Select Switch		-9-2.	
	6-3	·	
S2; CHROMA Level PRESET Swi	tch 1-2-1,2	-9- 3,	
	6-3		
S3; BLACK LEVEL PRESET Swit	ch1-2-1,2	- 9-3 ,	
	6-3		
S4; VIDEO Level PRESET Swit	ch 1-2-1,2	-9-3,	
	6-3		
S5; Y/C DELAY PRESET Switch	1-2-1,2	-9-3,	
	6-3		
S6; LOCAL/REMOTE Select Swi	tch 2-9-4,6	-3	
S101; DUB Mode Release Swit	ch2-9-2,6	-3	
CK-11 Board Section	Section		
LV1 11-1	LV2 10-2		
RV1; Video Phase Control .	· · · · · · · · 2-9-3,6	-3,	
	18-1		
RV2 9-1	RV4 10-3		
RV3 10-3	RV5 10-1		
S1; Y/C DELAY Switch			
S2; Chroma SHIFT/INV Switch	· · · · · · · · 2 -9- 3,6	-3	
IV-4A Board Section	Section		
RV1 19-2	RV4 8-1		
RV2 19-3	RV5 19-4		
RV3 8-3	RV6 8-2		
	1,40 0-2		

5-2

BVT-800PS

5-2. ALIGNMENT FLOW CHART



5-3. BOARD REPLACEMENT AND ADJUSTMENT

When the following circuit board has been replaced, the relative adjustments must be performed.

Board Required Adjustment

- SG-67 (1) 16-5. Burst Width & Level Adjustment
 - (2) 18-1. Video Phase Adjustment
 - (3) 18-2. Y/C Delay Adjustment
 - (4) 19-1. Output Y Level & Chroma Level Adjustment
- SG-68 (1) 14-7. Demodulator Output Level Adjustment
 - (2) 17-6. Modulator Input Level Adjustment
 - (3) 18-1. Video Phase Adjustment
 - (4) 18-3. Y/C Delay Preset Adjustment
 - (5) 19-1. Output Y Level & Chroma Level Adjustment
- PR-40 (1) 19-1. Output Y Level & Chroma Level Adjustment
- CK-11 (1) 18-1. Video Phase Adjustment
 - (2) 18-2. Y/C Delay Adjustment (For PAL Model)
 - (3) 18-3. Y/C Delay Preset Adjustment (For SECAM Model)
- IV-4A (1) 19-3. Normal Video Output Level Adjustment
 - (2) 19-4. Video Output Sync Level Adjustment



SECTION 6 PREPARATION FOR ALIGNMENT

SPG12 TSG11

6-1. TEST EQUIPMENT

(1) PAL Test Signal Generator

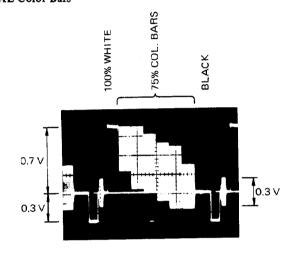
TEKTRONIX Type 1411 or Equivalent

Test Signal Module SYNC GENERATOR COLOR BAR GEN.

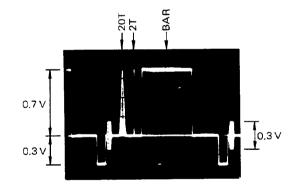
PULSE & BAR GEN. LINEARITY

TSG15 TSG13 TSG16 SWEEP GEN.

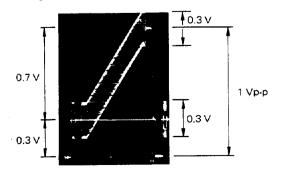
PAL Color Bars



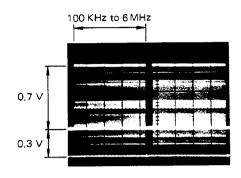
PAL Pulse & Bar



PAL Ramp Linearity

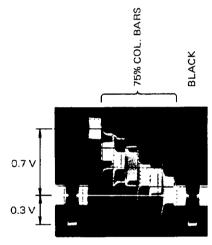


PAL Sweep



(2) SECAM Test Signal Generator TEKTRONIX Type 143 or Equivalent

SECAM Color Bars



(3) Oscilloscope and Probe Adapter Oscilloscope

Band Width: 200 MHz

TEKTRONIX 475 or Equivalent

Probe Adapter

Probe tip for grounding

TEKTRONIX Part No. 013-0085-00

(4) Waveform Monitor

TEKTRONIX 1485C or Equivalent Used for the following alignments. Section 18. Video Phase Alignment Section 19. Video Output Level Alignment

(5) Vectorscope

TEKTRONIX 521A or Equivalent Used for the following alignments. Section 16. Output Heterodyne Alignment

(6) Digital DC Voltmeter

Effective digits; more than 4½ digits.

Accuracy; Less than 0.02% ± 1 count

Used for the following alignments.

Section 7. Power Supply Alignment

Section 13. Reference Sync Generator Alignment

Section 15. Video Process Alignment

Section 17. Chroma Modulator Alignment

(7) DC Current Meter

10A range

Used for Section 7. Power Supply Alignment

(8) VTR

SONY BVU-800P/S, 820P/S

Used for the following alignments.

Section 10. AFC Alignment

Section 11. 1140FH VCO Alignment

Section 14. Chroma Demodulator Alignment

Section 15. Video Process Alignment

Section 16. Output Heterodyne Alignment

(9) Standard Signal Generator

Sine wave, 5 MHz

Used for Section 8. Dropout Pulse Generator Alignment

(10) Frequency Counter

Used for the following alignments.

Section 13. Reference Sync Generator Alignment

Section 14. Chroma Demodulator Alignment

(11) EB-9A Extension Board

SONY Part No. A-6252-050-A

One EB-9A is supplied with BVT-800PS.

(12) IC Test Clip

Type TC-16 Sony Part No. J-6041-770-A

Type TC-20 Sony Part No. J-6041-780-A

Manufacturer;

AP PRODUCTS INCORPORATED

Box 697 72 Corwin Drive

Painesville, Ohio 44077, USA

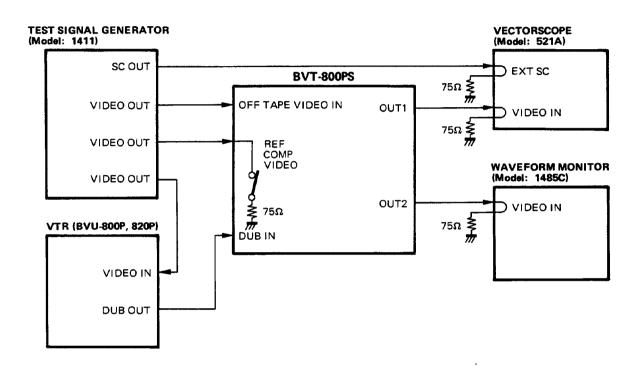
TEL; 216-354-2101

When connecting the test probe to the terminal of DIP integrated circuit, these clips are convenient. Type TC-16 is for DIP 14-pin or 16-pin IC and Type TC-20 is for 18-pin or 20-pin IC.

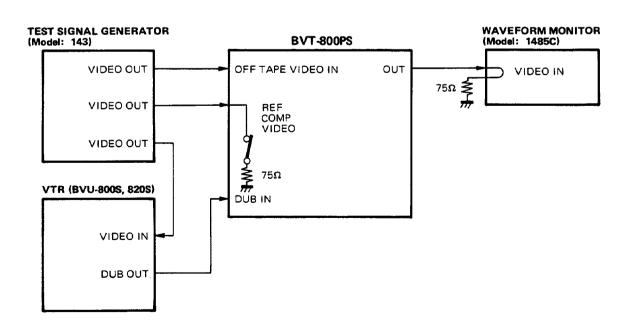


6-2. EQUIPMENT CONNECTION

Connection 1.

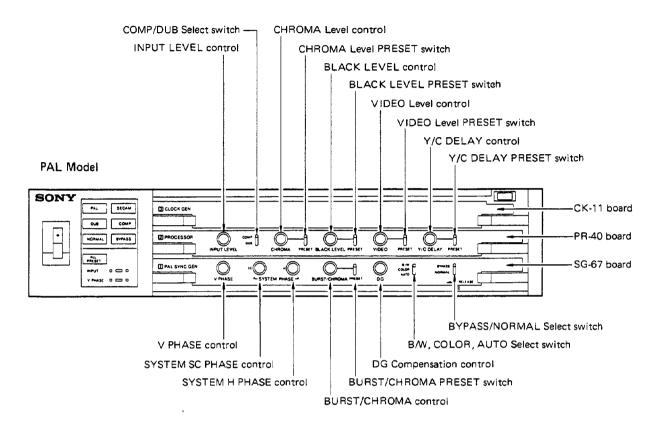


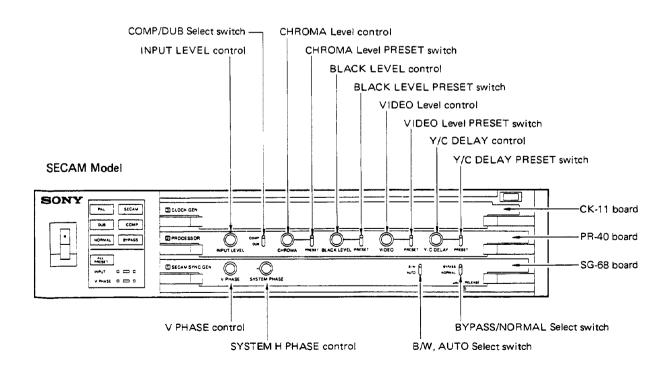
Connection 2.



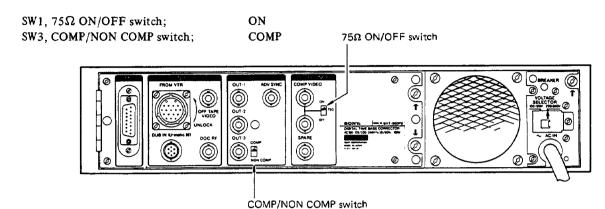
6-3

6-3. INITIAL SETTING OF SWITCHES & CONTROLS





Connector Panel



SG-67 Board S1, BURST/CHROMA PRESET Switch; PRESET S2, B/W, COLOR, AUTO Select Switch; AUTO S3, BYPASS/NORMAL Select Switch; NORMAL S4, Local/Remote Select Switch; Local S5 S6 V Blanking Line Select Switch; All set to ON S7 V Blanking Line Select Switch; OFF S500, Burst ON/OFF Switch; OFF

RV1, V PHASE Control;

When using the VTR, adjust so that the green lamp on the V PHASE indicator can light up. When not using the VTR, the position is free.

using the vik, the position is free	•
RV2, SYSTEM SC PHASE Control;	Free
RV3, SYSTEM H PHASE Control;	Free
RV4, BURST/CHROMA Control;	Free
RV5, DG Compensation Control;	Midrange
RV8, Front Porch Width Control;	Free
RV9, Line Blanking Width Control;	Free
RV 506. Burst Width Adjustment Con	trol: Free

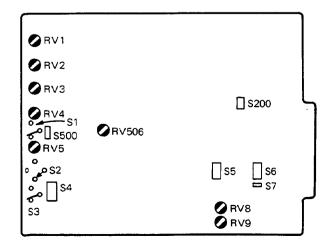
SG-68 Board

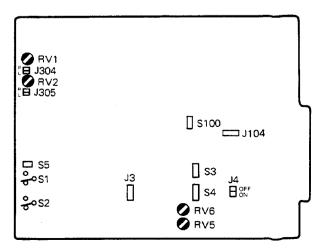
0 00 20410	
S1, B/W, AUTO Select Switch;	AUT0
S2, BYPASS/NORMAL Select Switch;	NORMAL
S3 S4 V Blanking Line Select Switch;	All set to ON
S5, ID ON/OFF Switch;	ON
S100, Chroma O/E Inertia Select Switch;	OFF

RV1, V PHASE Control;

When using the VTR, adjust so that the green lamp on the V PHASE indicator can light up. When not using the VTR, the position is free.

RV2, SYSTEM H PHASE Control;	Free
RV5, Chrominance SC Blanking Width	l
Control;	Free
RV6, Line Blanking Width Control;	Free
J3, D'R/D'B INT/EXT Select Jumper;	INT
J4, Chrominance SC Blanking ON/OF	F
Jumper;	OFF
J104, NOR/ADJ Select Jumper;	NOR
J304, Local/Remote Select Jumper;	Loca
J305, Local/Remote Select Jumper;	Local





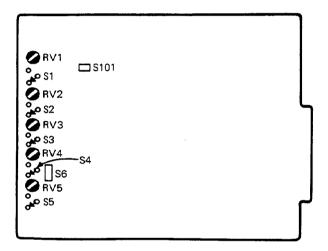
PR-40 Board

S1, COMP/DUB Select Switch; Free S2, CHROMA Level PRESET Switch; **PRESET** S3, BLACK LEVEL PRESET Switch; **PRESET PRESET** S4, VIDEO Level PRESET Switch; S5, Y/C DELAY PRESET Switch; **PRESET** S6, LOCAL/REMOTE Select Switch; LOCAL S101, DUB Mode Release Switch; ON

RV1, INPUT LEVEL Control;

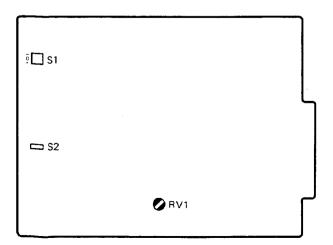
Adjust so that the green lamp on the INPUT indicator can light up.

Free RV2, CHROMA Level Control; Free RV3, BLACK LEVEL Control; RV4, VIDEO Level Control; Free RV5, Y/C DELAY Control; Free



CK-11 Board

"0" position S1, Y/C DELAY Switch; S2, Chroma SHIFT/INV Switch; SHIFT RV1, Video Phase Control; Free



SECTION 7 POWER SUPPLY ALIGNMENT

CAUTION

If the output voltage of the regulated power supply is out of specifications, the BVT-800PS may not operate properly. If necessary, perform the following adjustments.

7-1. POWER SUPPLY ADJUSTMENT WITHOUT LOAD

CAUTION

Remove the following circuit boards from the MB-35 board before performing each power supply adjustment.

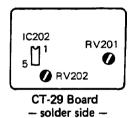
- 1) PR-40 Board (Remove the board from the MB-35 board.)
- 2) CK-11 Board (Remove the board from the MB-35 board.)
- 3) IV-4A Board (Remove the CN22 connector.)
- 4) DP-24A Board (Remove the CN6 connector on the MB-35 board.)

7-1-1. Switching Pulse Duty Adjustment without Load

Equipment; Digital DC Voltmeter

Adjustment

CT-29 Board IC202 pin 1 = +5.00±0.05 Vdc • RV202

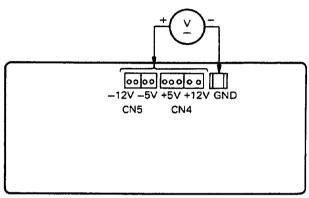


7-1-2. Voltage Adjustment without Load

Equipment; Digital DC Voltmeter

Caution

Insert the probe of the DC voltmeter into the terminal pin of the CN4 or CN5 connector and ground the GND tab.



MB-35 Board - solder side -

Step 1. +12 V Adjustment

MB-35 Board: CN4 pin 1 or $2 = +12.0\pm0.1 \text{ Vdc}$

PW-91A Board: RV92

Step 2. +5 V Adjustment

MB-35 Board: CN4 pin 3, 4 or $5 = +5.00\pm0.05 \text{ Vdc}$

PW-91A Board: RV72

Step 3. -5 V Adjustment

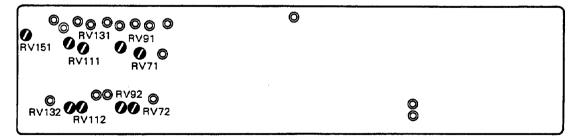
MB-35 Board: CN5 pin 1 or $2 = -5.00\pm0.05 \text{ Vdc}$

PW-91A Board: RV151

Step 4. -12 V Adjustment

MB-35 Board: CN5 pin 5 or $6 = -12.0 \pm 0.1 \text{ Vdc}$

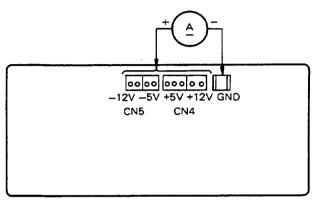
PW-91A Board: RV132



PW-91A Board - component side -

7-1-3. Short Current Adjustment without Load

Equipment; DC Current Meter



MB-35 Board - solder side -

Step 1. +12 V Adjustment

MB-35 Board: CN4 pin 1 or $2 = 1.20 \pm 0.12$ A

PW-91A Board: RV91 Step 2. +5 V Adjustment

MB-35 Board: CN4 pin 3, 4, or $5 = 2.0 \pm 0.2$ A

MB-35 Board: CN5 pin 1 or $2 = 0.80\pm0.08A$

MB-35 Board: CN5 pin 5 or $6 = 0.60\pm0.06A$

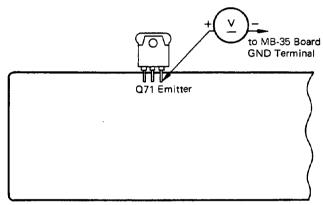
PW-91A Board: RV131

CAUTION

Connect each circuit board to the MB-35 board after performing the above power supply adjustment.

7-2. REGULATOR OUTPUT VOLTAGE ADJUSTMENT WITH LOAD

Equipment; Digital DC Voltmeter



PW-91A Board - component side -

Adjustment

PW-91A Board: Q71 emitter = $+6.00\pm0.05$ Vdc

SECTION 8 DROPOUT PULSE GENERATOR ALIGNMENT

8-1. RF AGC LEVEL ADJUSTMENT

Connection;

BVT-800PS sine wave standard signal 5 MHz DOC RF generator 0.5 Vp.p

Equipment;

Oscilloscope

Input; DC Switches & Controls Setting;

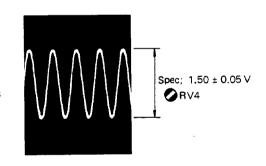
Same as Section 6-3.

Step 1. Setting of Signal Generator

Frequency; 5 MHz Amplitude; 0.5 Vp-p

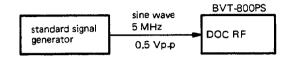
(Measured at TP7 on the IV-4A board.)

Step 2. Adjustment IV-4A Board



8-2. DOC KILLER ADJUSTMENT

Connection;



Equipment;

Oscilloscope

Input; DC

Switches & Controls Setting;

Same as Section 6-3.

Step 1. Setting of Signal Generator

Frequency; 5 MHz Amplitude; 0.5 Vp-p

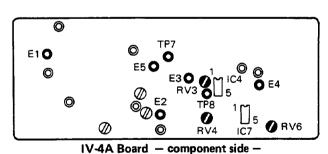
(Measured at TP7 on the IV-4A board.)

Step 2. Adjustment

IV-4A Board

Spec; IC7 pin 1 < 0 V

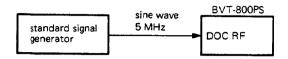
IC7 pin 6 = Voltage at IC7 pin 1 x 1.8 Vdc





8-3. DO LEVEL SENSITIVITY ADJUSTMENT

Connection;



Equipment; Oscilloscope

Input; DC

Switches & Controls Setting;

Same as Section 6-3.

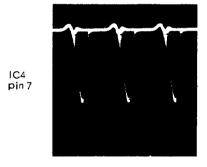
Step 1. Setting of Signal Generator

Frequency; 5 MHz Amplitude; 0.5 Vp-p

(Measured at TP8 on the IV-4A board.)

Step 2. Adjustment

Turn RV3 on the IV-4A board fully clockwise. IC4 pin 7 shows HIGH level (approx. +4 Vdc). Next, turning RV3 counterclockwise slowly, the negative pulse appears as shown below. Stop RV3 immediately after this pulse appears.



8-2

SECTION 9 SELECT H GENERATOR ALIGNMENT

9-1, SELECT H GENERATOR ADJUSTMENT

Connection; Same as Section 6-2, Connection 1 or 2

Equipment; Oscilloscope

Input; DC

Switches & Controls Setting;

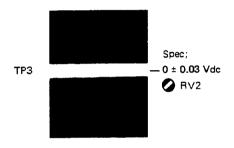
Same as Section 6-3

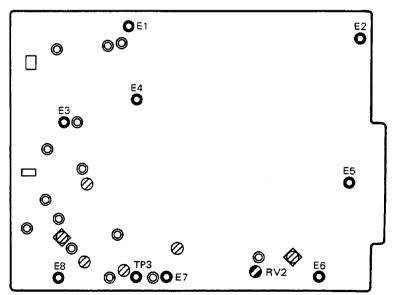
Input Signal (OFF TAPE VIDEO IN);

Color Bars (PAL or SECAM)

Adjustment

CK-11 Board





CK-11 Board - component side -



SECTION 10 AFC ALIGNMENT

10-1, SAWTOOTH WAVE SLOPE ADJUSTMENT

Connection; Same as Section 6-2, Connection 1 or 2

Oscilloscope Equipment;

Input; DC

Switches & Controls Setting;

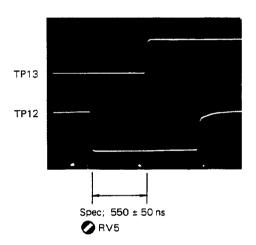
Same as Section 6-3

Input Signal (OFF TAPE VIDEO IN);

Color Bars (PAL or SECAM)

Adjustment

CK-11 Board



10-2. NARROW RANGE VCO ADJUSTMENT

Same as Section 6-2, Connection 1 or 2 Connection;

Equipment; Oscilloscope

Input; DC

Switches & Controls Setting;

Same as Section 6-3

Input Signal (OFF TAPE VIDEO IN);

Color Bars (PAL or SECAM)

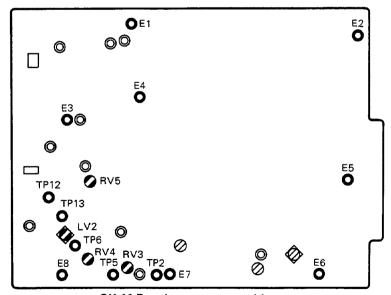
Step 1. Adjustment

CK-11 Board

Spec; $TP6 = -4.0 \pm 0.2 \text{ Vdc}$

OLV2

Step 2. Perform "10-1. Sawtooth Wave Slope Adjustment".



CK-11 Board - component side -

10-3. WIDE RANGE VCO ADJUSTMENT

Connection; Same as Section 6-2, Connection 1 or 2

VTR Mode; PLAY → REW Equipment; Oscilloscope

Input; DC

Switches & Controls setting;

Same as Section 6-3

Input Signal (OFF TAPE VIDEO IN);

Color Bars (PAL or SECAM)

Step 1. Offset Adjustment (PLAY mode)

Set the VTR to PLAY mode.

CK-11 Board

Short-circuit the TP2 and GND.



Remove the short circuit between the TP2 and GND.

Step 2. Gain Adjustment (REW mode)

Set the VTR to the REW mode and adjust RV3 to obtain the following value.

CK-11 Board



SECTION 11 1140FH VCO ALIGNMENT (For PAL Model)

11-1. 1140FH VCO ADJUSTMENT

Connection; Same as Section 6-2, Connection 1 or 2

Equipment; Oscilloscope

Input; DC

Switches & Controls Setting;

Same as Section 6-3 except the following.

PR-40 Board S1, COMP/DUB Switch; DUB

Input Signal (DUB IN);

Color Bars (PAL or SECAM)

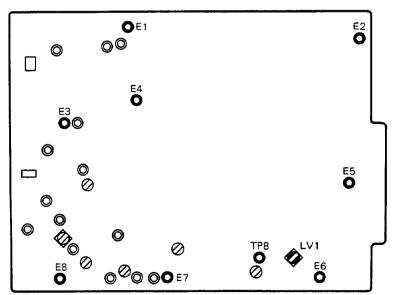
Adjustment

Set the VTR to EE mode.

CK-11 Board

Spec; TP8 = $-0.5 \pm 0.2 \text{ Vdc}$

🗸 LV1



CK-11 Board - component side -



SECTION 12 INPUT HETERODYNE ALIGNMENT (For PAL Model)

12-1. INPUT LEVEL CALIBRATION

Connection; Same as Section 6-2, Connection 1

Equipment; Oscilloscope

Input; DC

Switches & Controls Setting;

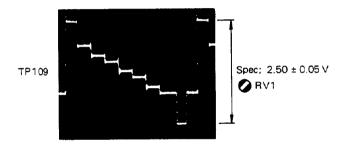
Same as Section 6-3 except the following.

PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal (OFF TAPE VIDEO IN);

PAL Color Bars

Adjustment PR-40 Board



12-2. BURST DETECTOR ADJUSTMENT

Connection; Same as Section 6-2, Connection 1

Equipment; Oscilloscope

Input; DC

Trigger; HD (test signal generator)

Switches & Controls Setting;

Same as Section 6-3 except the following.

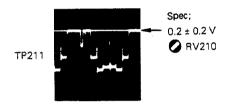
PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal (OFF TAPE VIDEO IN);

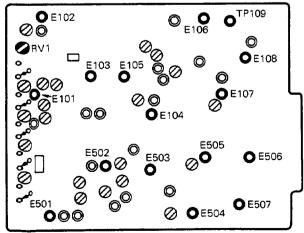
PAL Color Bars

Adjustment

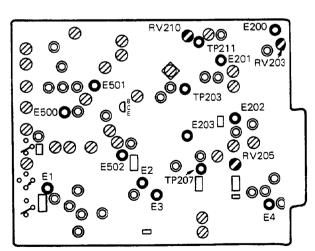
SG-67 Board



Caution; This adjustment is applicable only to SG-67 Board with Board No.1-608-858-13 & up.



PR-40 Board - component side -



SG-67 Board — component side —

12-3. APC ADJUSTMENT

Connection; Same as Section 6-2, Connection 1

Equipment; Oscilloscope

Input; DC

Trigger; HD (test signal generator)

Switches & Controls Setting;

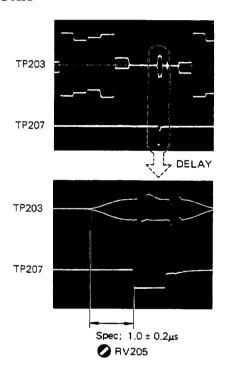
Same as Section 6-3 except the following.

PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal (OFF TAPE VIDEO IN);

PAL Color Bars

Adjustment SG-67 Board



12-4. WRITE CHROMA LEVEL ADJUSTMENT

Connection; Same as Section 6-2, Connection 1

Equipment; Oscilloscope

Input; DC

Trigger; HD (test signal generator)

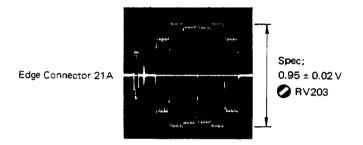
Switches & Controls Setting;

Same as Section 6-3 except the following. PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal (OFF TAPE VIDEO IN);

PAL Color Bars

Adjustment SG-67 Board



SECTION 13 REFERENCE SYNC GENERATOR ALIGNMENT (For SECAM Model)

13-1. D'R/D'B DETECTOR ADJUSTMENT

Connection; Same as Section 6-2, Connection 2

Equipment; Digital DC Voltmeter

Switches & Controls Setting;

Same as Section 6-3

Step 1. Turn off the SUBCARRIER AMPLITUDE switch

of the Model 143 Test Signal Generator.

Step 2. Adjustment

SG-68 Board

Spec; $TP5 = 100 \pm 1 \text{ mVdc}$

Step 3. Turn on the SUBCARRIER AMPLITUDE switch of the Test Signal Generator.

13-2. INTERNAL REFERENCE FREQUENCY ADJUSTMENT

Connection; Same as Section 6-2, Connection 2 except

for the following.

Remove the REF COMP VIDEO IN signal.

Equipment; Frequency Counter Switches & Controls Setting;

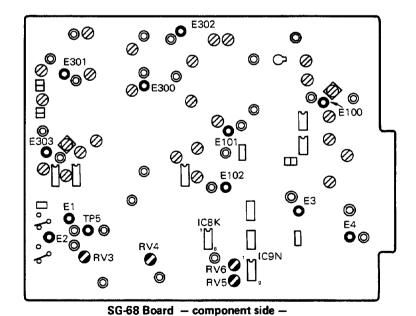
Same as Section 6-3.

Adjustment

SG-68 Board

Spec; IC8K pin $5 = 14,187,500 \pm 100 \,\text{Hz}$

RV4



13-1

13-3. BLANKING GENERATOR ADJUSTMENT

Connection; Same as Section 6-2, Connection 2

Equipment; Oscilloscope

Input; DC

Switches & Controls Setting;

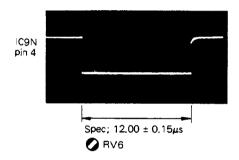
Same as Section 6-3

Input Signal (OFF TAPE VIDEO IN);

SECAM Color Bars

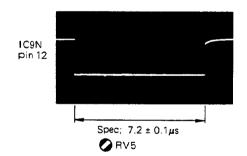
Step 1. Y Blanking Adjustment

SG-68 Board



Step 2. C Blanking Adjustment

SG-68 Board



13-2 BVT-800PS

SECTION 14 CHROMA DEMODULATOR ALIGNMENT (For SECAM Model)

14-1. FREQUENCY CONVERTER ADJUSTMENT

Connection; Same as Section 6-2, Connection 2

Equipment; Frequency Counter Switches & Controls Setting:

Same as Section 6-3 except the following.

PR-40 Board S1, COMP/DUB Switch; DUB

Input Signal (DUB IN);

SECAM Color Bars

Adjustment

SG-68 Board

Spec; $TP103 = 5,244,140 \pm 50 Hz$

CV100

14-2. CARRIER NULL ADJUSTMENT

Connection; Same as Section 6-2, Connection 2

Equipment; Oscilloscope

Input; DC

Trigger; 7.8 KHz (test signal generator)

Switches & Controls Setting;

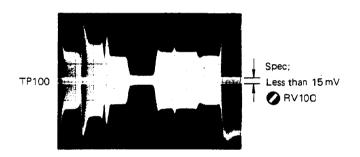
Same as Section 6-3 except the following. PR-40 Board S1, COMP/DUB Switch; DUB

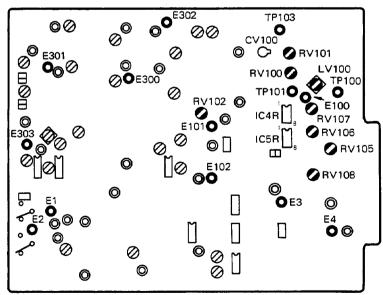
Input Signal (DUB IN);

SECAM Color Bars

Adjustment

SG-68 Board





SG-68 Board - component side -

14-3. DUB CHROMA LEVEL ADJUSTMENT

Connection; Same as Section 6-2, Connection 2

Equipment; Oscilloscopeunter

Input; DC

Trigger; 7.8 KHz (test signal generator)

Switches & Controls Setting;

Same as Section 6-3 except the following.

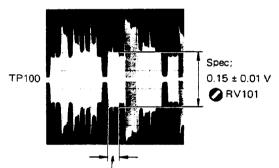
PR-40 Board S1, COMP/DUB Switch; DUB

Input Signal (DUB IN);

SECAM Color Bars

Adjustment

SG-68 Board



D'R Line Nonmodulation Subcarrier

14-4. BELL FILTER ADJUSTMENT

Connection; Same as Section 6-2, Connection 2

Equipment; Oscilloscope

Input; DC

Trigger; 7.8 KHz (test signal generator)

Switches & Controls Setting;

Same as Section 6-3 except the following.

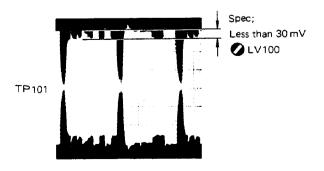
PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal (OFF TAPE VIDEO IN);

SECAM Color Bars

Adjustment

SG-68 Board



14-5. PILOT INSERT WIDTH ADJUSTMENT

Connection; Same as Section 6-2, Connection 2

Equipment; Oscilloscope

Input; DC

Switches & Controls Setting;

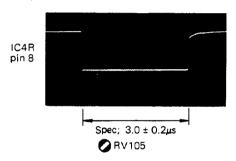
Same as Section 6-3 except the following.
PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal (OFF TAPE VIDEO IN);

SECAM Color Bars

Step 1. Adjustment

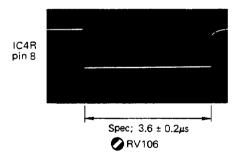
SG-68 Board



Step 2. Input the SECAM color bars to the DUB IN connector and set the PR-40 board \$1, COMP/DUB switch to DUB.

Step 3. Adjustment

SG-68 Board



14-6. WRITE O/E GENERATOR ADJUSTMENT

Connection; Same as Section 6-2, Connection 2

Equipment; Oscilloscope

Input; DC

Switches & Controls Setting:

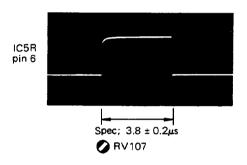
Same as Section 6-3 except the following.

PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal (OFF TAPE VIDEO IN);

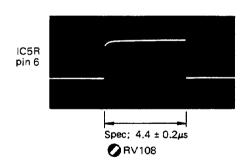
SECAM Color Bars

Step 1. Adjustment SG-68 Board



Step 2. Input the SECAM color bars to the DUB IN connector and set the PR-40 board S1, COMP/DUB switch to DUB.

Step 3. Adjustment SG-68 Board



14-7. DEMODULATOR OUTPUT LEVEL ADJUSTMENT

Connection; Same as Section 6-2, Connection 2

Equipment; Oscilloscope

Input; DC

Trigger; 7.8 KHz (test signal generator)

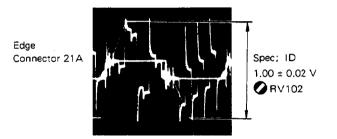
Switches & Controls Setting;

Same as Section 6-3 except the following. PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal (OFF TAPE VIDEO IN);

SECAM Color Bars

Step 1. Adjustment SG-68 Board

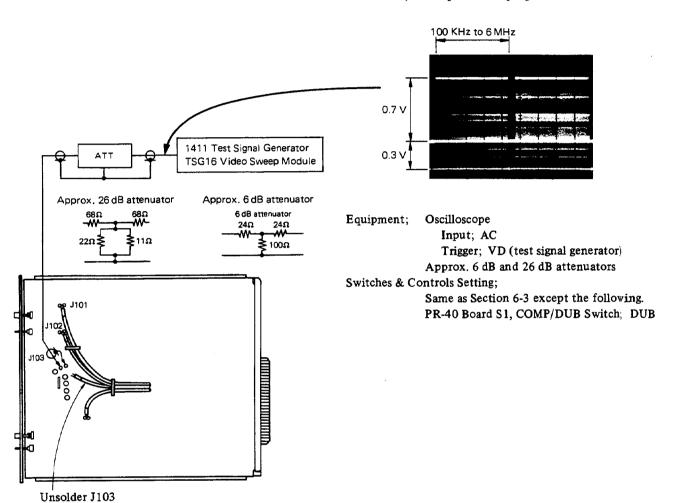


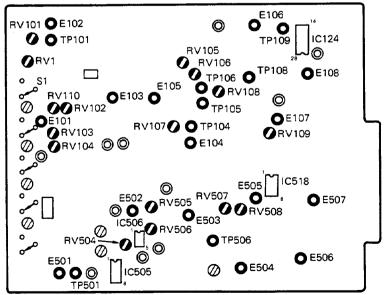


SECTION 15 VIDEO PROCESS ALIGNMENT

15-1. NOISE CANCELER ADJUSTMENT 1

Connection; Composite sweep signal





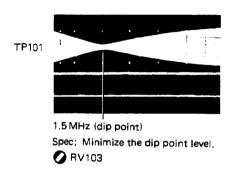
PR-40 Board - component side -

Step 1. Unsolder the J103 jumper leads from the PR-40 board.

Step 2. Supply a sweep signal through approx. 26 dB attenuator to J103 lands.

Step 3. Turn PR-40 board RV104 fully counterclockwise

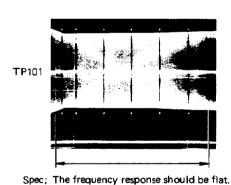
Step 4. Noise Canceler Adjustment PR-40 Board



Step 5. Change the attenuator to approx. 6 dB.

Step 6. Noise Canceler Low-range Compensator Adjustment

PR-40 Board



Step 7. Remove the attenuator and connect J103 in its place on the PR-40 board.

15-2. NOISE CANCELER ADJUSTMENT 2

Connection; Same as Section 6-2, Connection 1

Equipment; Oscilloscope

Input; DC

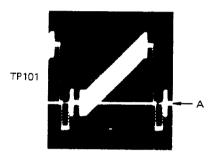
Trigger; HD (test signal generator)

Switches & Controls Setting;

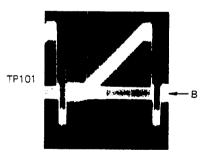
Same as Section 6-3 except the following. PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal; Lamp linearity 1 Vp-p

Step 1. Memorize "A" level shown below. PR-40 Board



Step 2. Set the PR-40 board S1, COMP/DUB switch to DUB.
PR-40 Board



Spec; B (in step 2) = A (in step 1)

RV102

15-3. VIDEO LEVEL ADJUSTMENT

Connection; Same as Section 6-2, Connection 1 or 2

Equipment; Oscilloscope

Input; DC

Trigger; HD (test signal generator)

Switches & Controls Setting;

Same as Section 6-3 except the following.

PR-40 Board S1, COMP/DUB Switch; COMP

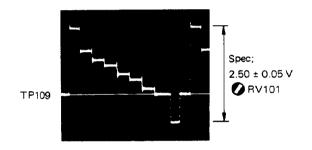
Input Signal (OFF TAPE VIDEO IN);

Color Bars (PAL or SECAM)

Step 1. Match the dot mark on the INPUT LEVEL control (PR-40 board RV1) to the center mark on the BVT-800PS front panel.

Step 2. Video Level Adjustment

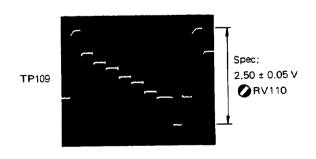
PR-40 Board



Caution; The following steps should be performed only for the PR-40 board with Board No.1-607-857-12 and up.

Step 3. Input the color bars to the DUB IN connector and set the S1, COMP/DUB switch to DUB.

Step 4. DUB-Y Level Adjustment PR-40 Board



15-4. A/D CONVERTER REFERENCE VOLTAGE ADJUSTMENT

Equipment; Digital DC Voltmeter

Switches & Controls Setting;

Same as Section 6-3

Adjustment

PR-40 Board

Spec; IC124 pin 28 = -1.98 to -2.00 Vdc

⊘RV108

15-5. INPUT LEVEL INDICATOR CALIBRATION

Equipment; Digital DC Voltmeter

Switches & Controls Setting;

Same as Section 6-3.

Adjustment

PR-40 Board

Spec; Voltage between TP105 (+) and TP106 (ground)

 $= 112 \pm 5 \,\mathrm{mV}$

⊘RV105

15-6. Y-PEDESTAL ADJUSTMENT

Connection; Same as Section 6-2, Connection 1 or 2

Equipment; (

Oscilloscope

Input; DC

Trigger; HD (test signal generator)

Switches & Controls Setting;

Same as Section 6-3 except the following.

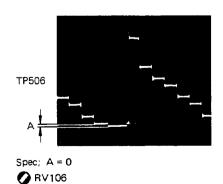
PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal (OFF TAPE VIDEO IN);

Color Bars (PAL or SECAM)

Adjustment

PR-40 Board



15-7. WRITE CHROMA LEVEL & WRITE CHROMA PEDESTAL LEVEL **ADJUSTMENT**

Connection; Same as Section 6-2, Connection 1 or 2

Equipment: Oscilloscope

Input; DC

Trigger; HD (For PAL, test signal genera-

7.8 KHz (For SECAM, test signal

generator)

Switches & Controls Setting;

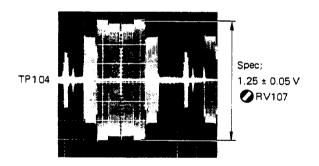
Same as Section 6-3 except the following. PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal (OFF TAPE VIDEO IN);

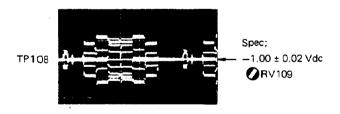
Color Bars (PAL or SECAM)

For PAL Model

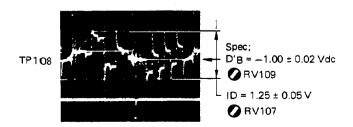
Step 1. Write Chroma Level Adjustment PR-40 Board



Step 2. Pedestal Level Adjustment PR-40 Board



For SECAM Model Adjustment PR-40 Board



15-8. Y/C DELAY CONTROL CALIBRATION

Same as Section 6-2. Connection 1 or 2

Equipment: Oscilloscope

Input; DC

Switches & Controls Setting;

Same as Section 6-3

Input Signal (OFF TAPE VIDEO IN);

Color Bars (PAL or SECAM)

PR-40 Board (1-608-857-11, 12 & 13)

Step 1. Make sure that the following controls are in the

midrange.

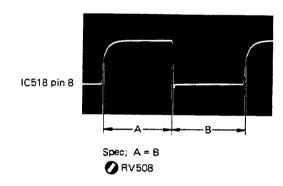
SG-67 board RV208, RV209 SG-68 board RV103, RV104

Step 2. Set the PR-40 board S1, COMP/DUB switch to

DUB.

Step 3. Adjustment

PR-40 Board



Caution; The following steps are applicable only up to PR-40 board with Board No. 1-608-857-12.

Step 4. Set the PR-40 board S1, COMP/DUB switch to COMP.

Step 5. Adjustment

PR-40 Board IC518 pin 8: A = B (Refer to step 3.)

15-9. D/A CHROMA LEVEL ADJUSTMENT

Connection; Same as Section 6-2, Connection 1 or 2

Equipment; Oscilloscope

Input; DC

Trigger; HD (For PAL, test signal genera-

7.8 KHz (For SECAM, test signal

generator)

Switches & Controls Setting;

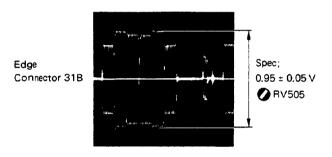
Same as Section 6-3 except the following.

PR-40 Board S1, COMP/DUB Switch; COMP

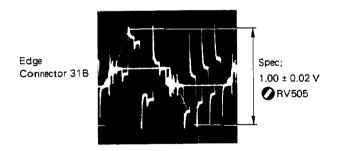
Input Signal (OFF TAPE VIDEO IN);

Color Bars (PAL or SECAM)

Adjustment For PAL Model PR-40 Board



For SECAM Model PR-40 Board



15-10. BLACK LEVEL CONTROL **CALIBRATION**

Connection; Same as Section 6-2, Connection 1 or 2

Equipment; Oscilloscope

Input; DC

Trigger; HD (test signal generator)

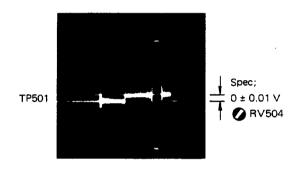
Switches & Controls Setting;

Same as Section 6-3 except the following. PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal (OFF TAPE VIDEO IN);

Color Bars (PAL or SECAM)

Adjustment PR-40 Board



15-11. DG COMPENSATION CONTROL CALIBRATION

Connection; Same as Section 6-2, Connection 1 or 2

Equipment; Oscilloscope

Input; DC

Trigger; HD (test signal generator)

Switches & Controls Setting;

Same as Section 6-3 except the following. PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal (OFF TAPE VIDEO IN);

Color Bars (PAL or SECAM)

Step 1. For PAL Model

Match the dot mark on the DG compensation control (SG-67 board RV5) to the center mark on the BVT-800PS front panel.

Step 2. Adjustment PR-40 Board



15-12. CHROMA LEVEL CONTROL CALIBRATION

Connection; Same as Section 6-2, Connection 1 or 2

Equipment;

Oscilloscope

Input; DC

Trigger; HD (test signal generator)

Switches & Controls Setting;

Same as Section 6-3 except the following.

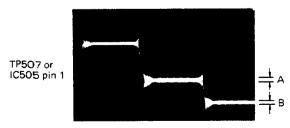
PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal (OFF TAPE VIDEO IN);

Color Bars (PAL or SECAM)

Adjustment

PR-40 Board



Spec; Chroma leakage (A, B) = minimum

RV501

SECTION 16 OUTPUT HETERODYNE ALIGNMENT (For PAL Model)

16-1. D/A OUTPUT LEVEL CALIBRATION

Connection; Same as Section 6-2, Connection 1

Equipment; Oscilloscope

Input; DC

Switches & Controls Setting;

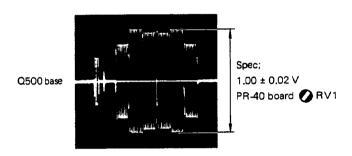
Same as Section 6-3 except the following.

PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal (OFF TAPE VIDEO IN);

PAL Color Bars

Adjustment SG-67 Board



16-2. CARRIER NULL ADJUSTMENT

Connection; Same as Section 6-2, Connection 1

Equipment; Oscilloscope

Input; DC

Switches & Controls Setting;

Same as Section 6-3 except the following.
PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal (OFF TAPE VIDEO IN);

PAL Color Bars

Step 1. Check that the SG-67 board J3 Normal/Test Select Jumper plug has been set.

Step 2. Adjustment

SG-67 Board



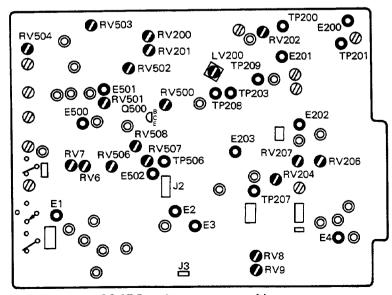
Step 3. Remove the J3 Normal/Test Select Jumper plug.

Step 4. Adjustment

SG-67 Board



Step 5. Set the J3 Normal/Test Select Jumper plug again.



SG-67 Board - component side -

16-3. CHROMA LEVEL ADJUSTMENT

Connection; Same as Section 6-2, Connection 1

Equipment; Oscilloscope

Input; DC

Switches & Controls Setting;

Same as Section 6-3 except the following. PR-40 Board S1, COMP/DUB Switch; COMP

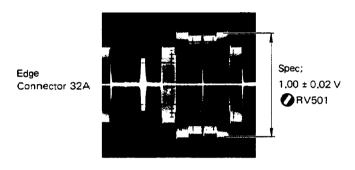
Input Signal (OFF TAPE VIDEO IN);

PAL Color Bars

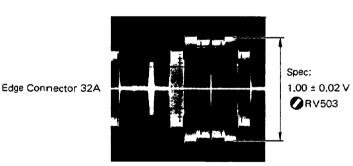
Step 1. Check that the SG-67 board J3 Normal/Test Select Jumper plug has been set.

Step 2. Adjustment

SG-67 Board



Step 3. Remove the J3 Normal/Test Select Jumper plug.Step 4. AdjustmentSG-67 Board



Step 5. Set the J3 Normal/Test Select Jumper plug again.

16-4. BURST OFFSET ADJUSTMENT

Connection; Same as Section 6-2, Connection 1

Equipment; Oscilloscope

Input: DC

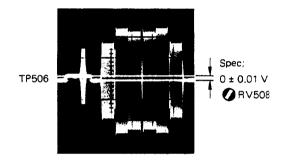
Switches & Controls Setting;

Same as Section 6-3 except the following. PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal (OFF TAPE VIDEO IN);

PAL Color Bars

Adjustment SG-67 Board



16-5. BURST WIDTH & LEVEL ADJUSTMENT

Connection; Same as Section 6-2, Connection 1

Equipment; Oscilloscope

Input; DC

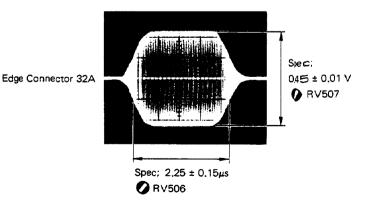
Switches & Controls Setting;

Same as Section 6-3 except the following.
PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal (OFF TAPE VIDEO IN);

PAL Color Bars

Adjustment SG-67 Board



16-6. BURST/CHROMA PHASE ADJUSTMENT

Connection; Same as Section 6-2, Connection 1

Equipment; Vectorscope Switches & Controls Setting;

Same as Section 6-3 except the following.

PR-40 Board S1, COMP/DUB Switch; COMP

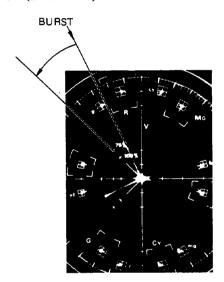
Input Signal (OFF TAPE VIDEO IN);

PAL Color Bars

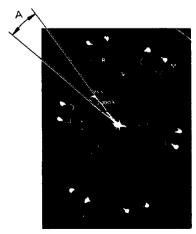
Step 1. Adjust the vectorscope so that the yellow spot appears within the YL target.

Step 2. Select the jumper position of J2 (SG-67 board) so that the burst coincides with the burst position on the vectorscope.

OUT-1 (BVT-800PS)



Step 3. Fine Adjustment OUT-1 (BVT-800PS)

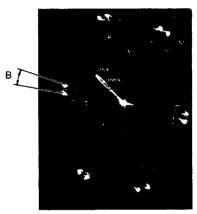


Spec; $A = 0 \pm 1\%$

✓ VECTORSCOPE PHASE Control

Step 4. Set the PR-40 board S1, COMP/DUB switch to COMP or DUB.

OUT-1 (BVT-800PS)



Spec; $B = 0 \pm 1^{\circ}$ (COMP mode)

SG-67 board RV6

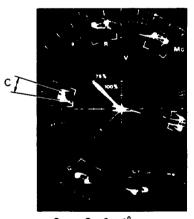
Spec; $B = 0 \pm 1^{\circ}$ (DUB mode)

SG-67 board RV7

Step 5. Set the PR-40 board S1, COMP/DUB switch to COMP and remove the J3 Jumper plug.

Step 6. Adjustment

OUT-1 (BVT-800PS)



Spec; $C = 0 \pm 1^{\circ}$ SG-67 board RV504

Step 7. Set the J3 Jumper plug again.

16-7. ACC ADJUSTMENT

Connection; Same as Section 6-2, Connection 1

Equipment; Vectorscope Switches & Controls Setting;

Same as Section 6-3 except the following.

PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal (OFF TAPE VIDEO IN);

PAL Color Bars

Adjustment
OUT-1 (BVT-800PS)





Spec; The dots become smallest. SG-67 board RV202

16-8. BLANKING ADJUSTMENT

Connection; Same as Section 6-2, Connection 1

Equipment; Oscilloscope

Input; DC

Switches & Controls Setting;

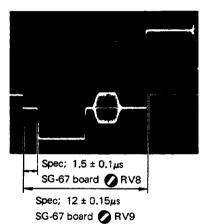
Same as Section 6-3 except the following. PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal (OFF TAPE VIDEO IN);

PAL Color Bars

Step 1. Set the PR-40 board S3, BLACK LEVEL PRESET switch to manual and turn the BLACK LEVEL control fully clockwise.

Step 2. Adjustment OUT-1 (BVT-800PS)



Step 3. Set the PR-40 board S3 BLACK LEVEL PRESET switch to PRESET.

16-4 BVT-800PS

16-9. DUB APC ADJUSTMENT

Connection; Same as Section 6-2, Connection 1

Equipment; Oscilloscope

Input; DC

Switches & Controls Setting;

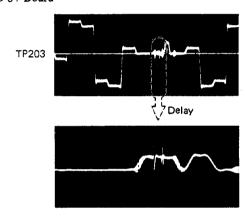
Same as Section 6-3 except the following.

PR-40 Board S1, COMP/DUB Switch; DUB

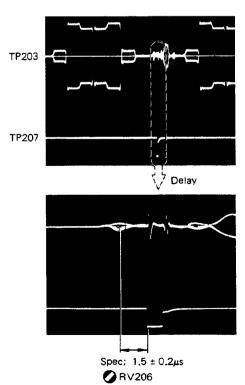
Input Signal (OFF TAPE VIDEO IN);

PAL Color Bars

Step 1. Adjustment (1) SG-67 Board



Step 2. Adjustment (2) SG-67 Board



16-10. DUB BURST SAMPLING PULSE ADJUSTMENT

Connection; Same as Section 6-2, Connection 1

Equipment; Oscilloscope

Input; DC

Switches & Controls Setting;

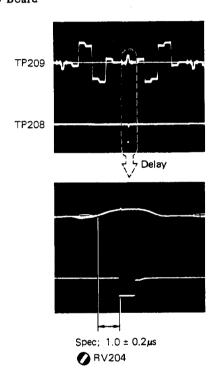
Same as Section 6-3 except the following.

PR-40 Board S1, COMP/DUB Switch; DUB

Input Signal (OFF TAPE VIDEO IN);

PAL Color Bars

Adjustment SG-67 Board



16-11. DUB CARRIER NULL ADJUSTMENT

Connection; Same as Section 6-2, Connection 1

Equipment; Oscilloscope

Input; DC

Switches & Controls Setting;

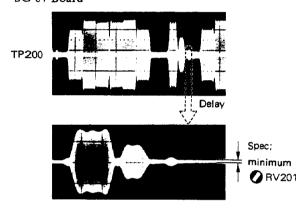
Same as Section 6-3 except the following. PR-40 Board S1, COMP/DUB Switch; DUB

Input Signal (OFF TAPE VIDEO IN);

PAL Color Bars

Adjustment

SG-67 Board



16-12. PILOT BLANKING ADJUSTMENT

Connection; Same as Section 6-2, Connection 1

Equipment; Oscilloscope

Input; DC

Switches & Controls Setting;

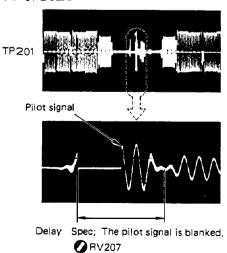
Same as Section 6-3 except the following. PR-40 Board S1, COMP/DUB Switch; DUB

Input Signal (OFF TAPE VIDEO IN);

PAL Color Bars

Adjustment

SG-67 Board



16-13. WRITE CHROMA LEVEL ADJUSTMENT

Connection; Same as Section 6-2, Connection 1

Equipment; Oscilloscope

Input; DC

Switches & Controls Setting;

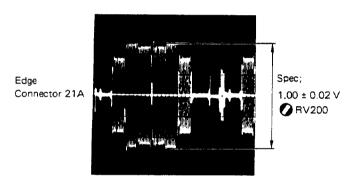
Same as Section 6-3 except the following. PR-40 Board S1, COMP/DUB Switch; DUB

Input Signal (OFF TAPE VIDEO IN);

PAL Color Bars

Adjustment

SG-67 Board



SECTION 17 CHROMA MODULATOR ALIGNMENT (For SECAM Model)

17-1. D/A CHROMA CLAMP PULSE POSITION ADJUSTMENT

Connection; Same as Section 6-2, Connection 2

Equipment; Oscilloscope

Input; DC

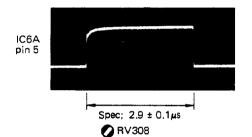
Switches & Controls Setting;

Same as Section 6-3

Input Signal (OFF TAPE VIDEO IN);

SECAM Color Bars

Adjustment SG-68 Board



17-2. CHROMA & ID START POSITION ADJUSTMENT

Connection; Same as Section 6-2, Connection 2

Equipment; C

Oscilloscope Input: DC

Switches & Controls Setting;

Same as Section 6-3

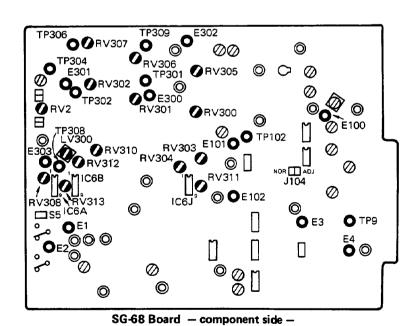
Input Signal (OFF TAPE VIDEO IN);

SECAM Color Bars.

Adjustment

SG-68 Board





17-1

17-3. READ CHROMA CLAMP PULSE POSITION ADJUSTMENT

Connection: Same as Section 6-2, Connection 2

Equipment; Oscilloscope

Input; DC

Switches & Controls Setting;

Same as Section 6-3

Input Signal (OFF TAPE VIDEO IN);

SECAM Color Bars

Adjustment

SG-68 Board



17-4. MODULATOR VCO ADJUSTMENT

Equipment; Digital DC Voltmeter

Switches & Controls Setting;

Same as Section 6-3

- Step 1. Wait for five minutes with power on, and perform the following steps.
- Step 2. Turn off the SUBCARRIER AMPLITUDE switch of the Model 143 Test Signal Generator and also turn off the SG-68 board S5, ID ON/OFF switch.
- Step 3. Connect the minus probe of the voltmeter to TP304, and connect the plus probe to TP302.

SG-68 Board:

Spec; TP302 = TP304 + (-2.45 ± 0.01) Vdc

Step 4. Change the connection of the plus probe from TP302 to TP306.

SG-68 Board:

Spec; TP306 = TP304 + (-2.45 ± 0.01) Vdc \bigcirc RV307

Step 5. Turn on the SUBCARRIER AMPLITUDE switch of the Test Signal Generator and the SG-68 board S5 switch.

17-5. CHROMA PEDESTAL LEVEL ADJUSTMENT

Connection; Same as Section 6-2, Connection 2

Equipment; Oscilloscope

Input; DC

Trigger; 7.8 KHz (test signal generator)

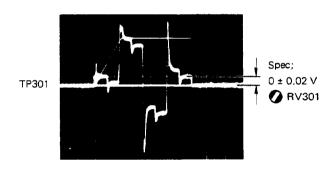
Switches & Controls Setting;

Same as Section 6-3

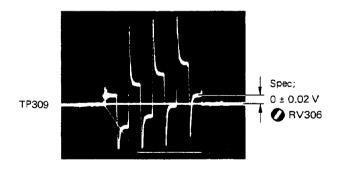
Input Signal (OFF TAPE VIDEO IN):

SECAM Color Bars

Step 1. Adjustment (1) SG-68 Board



Step 2. Adjustment (2) SG-68 Board



17-6. MODULATOR INPUT LEVEL ADJUSTMENT

Connection; Same as Section 6-2, Connection 2

Equipment; Oscilloscope

Input; DC

Trigger; 7.8 KHz (test signal generator)

Switches & Controls Setting;

Same as Section 6-3

Input Signal (OFF TAPE VIDEO IN);

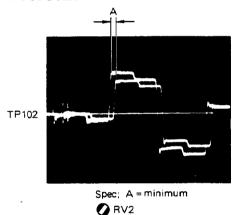
SECAM Color Bars

Step 1. Turn off the PRE EMPHASIS switch of the Model 143 Test Signal Generator.

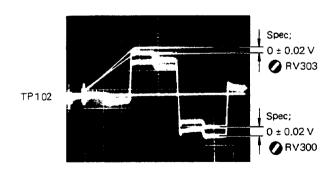
Step 2. Set the SG-68 board J104, NOR/ADJ Jumper plug to ADJ.

Step 3. Time Base Adjustment

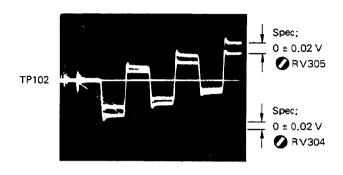
SG-68 Board



Step 4. D'R Adjustment SG-68 Board



Step 5. D'B Adjustment SG-68 Board



Step 6. Set the SG-68 board J104 to NOR.

Step 7. Turn on the PRE EMPHASIS switch of the Model 143 Test Signal Generator.

17-7. BLANKING LEVEL ADJUSTMENT

Connection; Same as Section 6-2, Connection 2

Equipment; Oscilloscope

Input; DC

Trigger; 7.8 KHz (test signal generator)

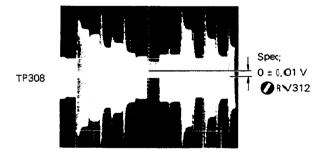
Switches & Controls Setting;

Same as Section 6-3

Input Signal (OFF TAPE VIDEO IN);

SECAM Color Bars

Step 1. Adjustment SG-68 Board



17. C

17-8. ANTI-BELL FILTER ADJUSTMENT

Connection; Same as Section 6-2, Connection 2

Equipment; Oscilloscope

Input; DC

Trigger; 7.8 KHz (test signal generator)

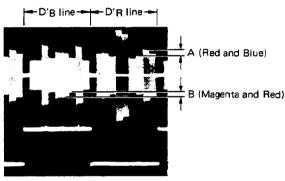
Switches & Controls Setting;

Same as Section 6-3 except the following. PR-40 Board S1, COMP/DUB Switch; COMP

Input Signal (OFF TAPE VIDEO IN); SECAM Color Bars

Step 1. Turn off the PRE EMPHASIS switch of the Model 143 Test Signal Generator.

Step 2. Adjustment SG-68 Board



Spec; $A = B = 0 \pm 0.02 \text{ V}$ $\triangle \text{ LV300}$

Step 3. Turn on the PRE EMPHASIS switch of the Model 143 Test Signal Generator.

17-9. MODULATOR OUTPUT LEVEL ADJUSTMENT

Connection; Same as Section 6-2, Connection 2

Equipment; Oscilloscope

Input; DC

Trigger; 7.8 KHz (test signal generator)

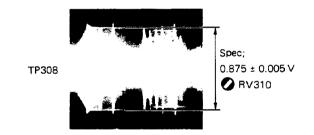
Switches & Controls Setting;

Same as Section 6-3

Input Signal (OFF TAPE VIDEO IN);

SECAM Color Bars

Adjustment SG-68 Board



SECTION 18 VIDEO PHASE ALIGNMENT

18-1. VIDEO PHASE ADJUSTMENT

Connection; Same as Section 6-2, Connection 1

Equipment; Waveform Monitor

SYNC: INT

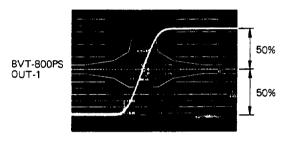
Switches & Controls Setting;

Same as Section 6-3 except the following.
PR-40 Board S1, COMP/DUB Switch; COMP
SG-67 Board S3
SG-68 Board S2
Switch; BYPASS

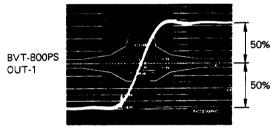
Input Signal (OFF TAPE VIDEO IN);

Pulse & Bar

Step 1. Set the rising edge of the bar signal at the graticule center.

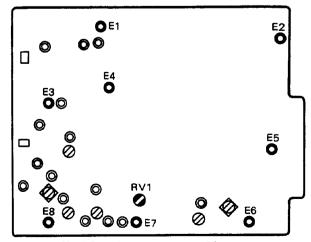


Step 2. Set the SG-67/68 board, BYPASS/NORMAL switch to NORMAL.



Spec; Rising edge of the bar coincides with the graticule center.

CK-11 board RV1



CK-11 Board — component side —

18-2. Y/C DELAY ADJUSTMENT (For PAL Model)

Connection; Same as Section 6-2, Connection 1.

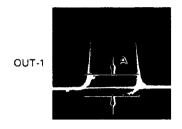
Equipment; Waveform Monitor Switches & Controls Setting;

Same as Section 6-3

Input Signal (OFF TAPE VIDEO IN);

Modulated 20T of Pulse & Bar

Adjustment BVT-800PS



Spec; A = minimum

SG-67 board, RV209 (PR-40 board S1, COMP/DUB

switch; COMP)

SG-67 board, RV208 (PR-40 board S1, COMP/DUB switch; DUB)

SG-67 Board - component side -

18-3. Y/C DELAY PRESET ADJUSTMENT (For SECAM Model)

Connection; Same as Section 6-2, Connection 2

Equipment; Waveform Monitor Switches & Controls Setting;

Same as Section 6-3 except the following.

PR-40 Board S1, COMP/DUB Switch; COMP

SG-67 Board S3

SG-68 Board S2 BYPASS/NORMAL Select Switch; BYPASS

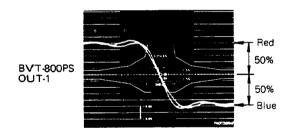
Input Signal (OFF TAPE VIDEO IN); Color Bars (SECAM)

Step 1. Set the red-blue transition at the graticule center.

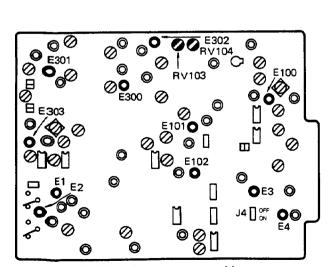
Step 2. Remove the J4 chrominance SC Blank jumper from OFF position.

Step 3. Set the SUBCARRIER AMPLITUDE switch to VAR, decreasing the subcarrier level and stop right before the BVT-800PS changes to the B/W mode.

Step 4. Set the red-blue transition at the graticule center again.

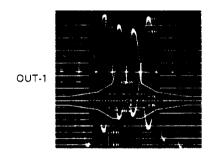


Step 5. Insert J4 into OFF position, and set the Y and PRE-EMPHASIS switches on the WFM to OFF.



SG-68 Board - component side -

Step 6. Adjustment BVT-800PS



Spec; Minimum point of the chrominance subcarrier envelope coincides with the graticule center.

SC-68 board RV104

Step 7. Perform the same adjustment for DUB mode.

Spec; Same as Step 6. SG-68 board RV103

SECTION 19 VIDEO OUTPUT LEVEL ALIGNMENT

19-1. OUTPUT Y LEVEL & CHROMA LEVEL ADJUSTMENT

Connection; Same as Section 6-2, Connection 1 or 2

Equipment; Oscilloscope

Input; DC

Trigger; HD (For PAL, test signal genera-

tor)

7.8 KHz (For SECAM, test signal

generator)

Switches & Controls Setting:

Same as Section 6-3

Input Signal (OFF TAPE VIDEO IN);

Color Bars (PAL or SECAM)

Step 1. Output Y Level Adjustment PR-40 Board



Step 2. Check that the chroma level at Edge Connector 32B on PR-40 board is within the following specification.

SG-67 Board (For PAL Model)

Spec; Write Chroma Level = 1.00 ± 0.02 Vp-p

SG-68 Board (For SECAM Model)

Spec; $D'R = 875 \pm 5 \text{ mVp-p}$

If the value is out of the specification, perform the following adjustment.

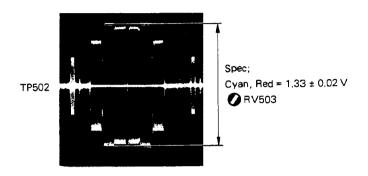
SG-67 Board:

Section 12-4. Write Chroma Level Adjustment SG-68 Board:

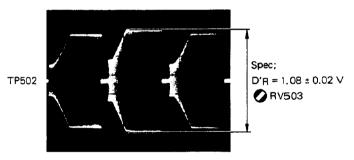
Section 17-9. Modulator Output Level Adjustment

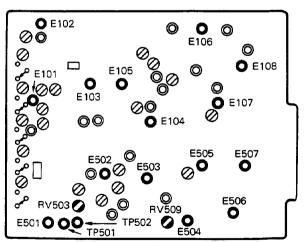
Step 3. Output Chroma Level Adjustment

For PAL Model PR-40 Board



For SECAM Model PR-40 Board





PR-40 Board - component side -

19-2. BYPASS VIDEO OUTPUT LEVEL **ADJUSTMENT**

Connection; Same as Section 6-2, Connection 1

Equipment; Waveform Monitor Switches & Controls Setting:

Same as Section 6-3 except the following.

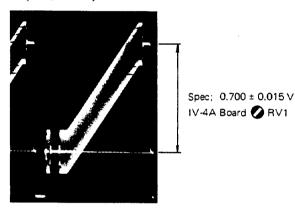
SG-67 Board S3 SG-68 Board S2 BYPASS/NORMAL Select Switch; BYPASS

Input Signal (OFF TAPE VIDEO IN);

Ramp linearity 1 Vp-p, 0.3 V subcarrier ON

Adjustment

OUT-1 (BVT-800PS)



19-3. NORMAL VIDEO OUTPUT LEVEL **ADJUSTMENT**

Connection; Same as Section 6-2, Connection 1

Equipment: Waveform Monitor Switches & Controls Setting:

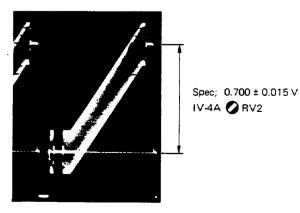
Same as Section 6-3

Input Signal (OFF TAPE VIDEO IN);

Ramp linearity 1 Vp-p, 0.3 V subcarrier ON

Adjustment

OUT-1 (BVT-800PS)



19-4. VIDEO OUTPUT SYNC LEVEL **ADJUSTMENT**

Connection; Same as Section 6-2, Connection 1

Equipment; Waveform Monitor Switches & Controls Setting;

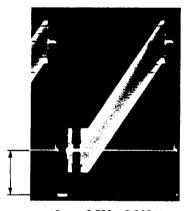
Same as Section 6-3

Input Signal (OFF TAPE VIDEO IN);

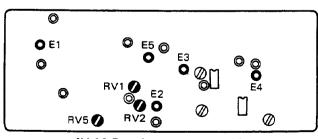
Ramp linearity 1 Vp-p, 0.3 V subcarrier ON

Adjustment

OUT-1 (BVT-800PS)



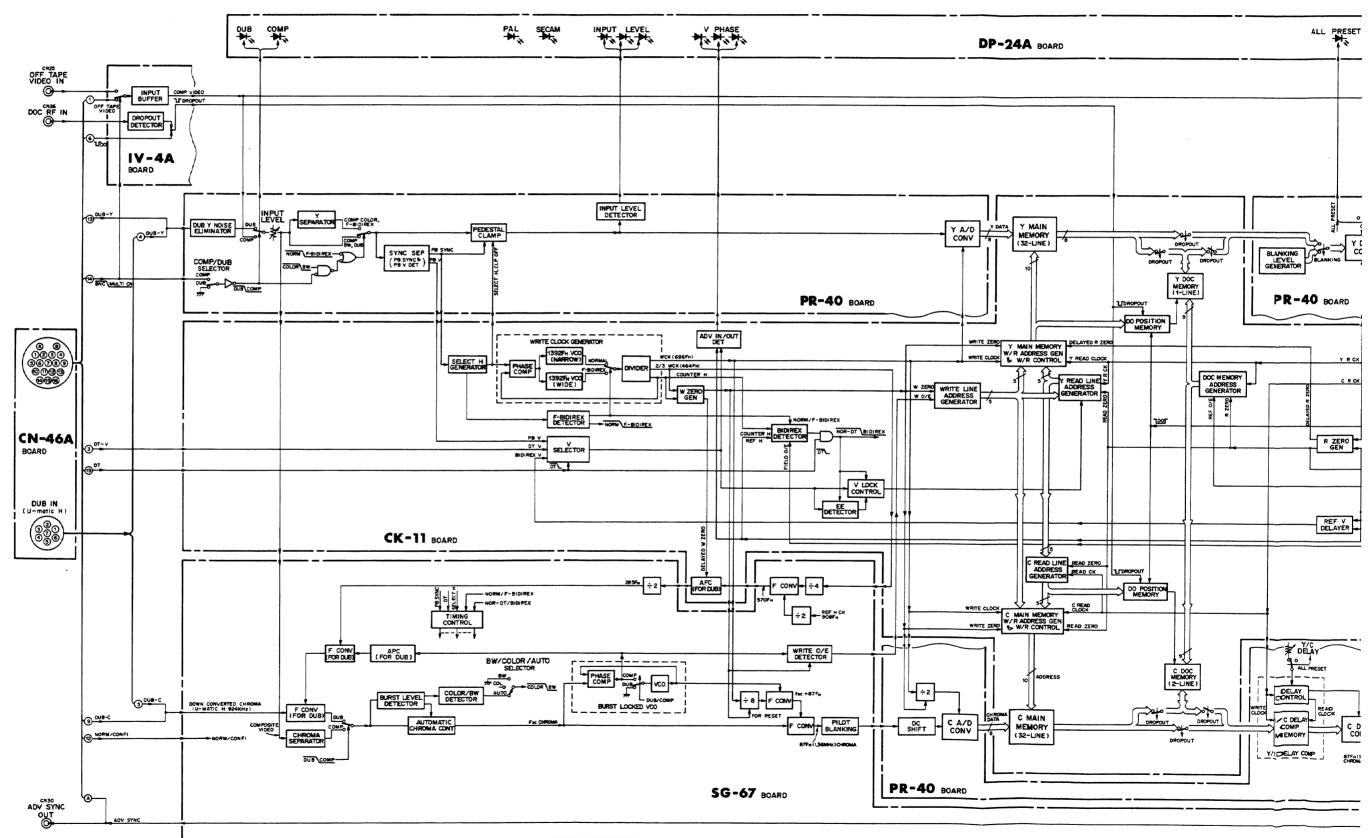
Spec; 0.300 ± 0.006 V IV-4A Board RV5

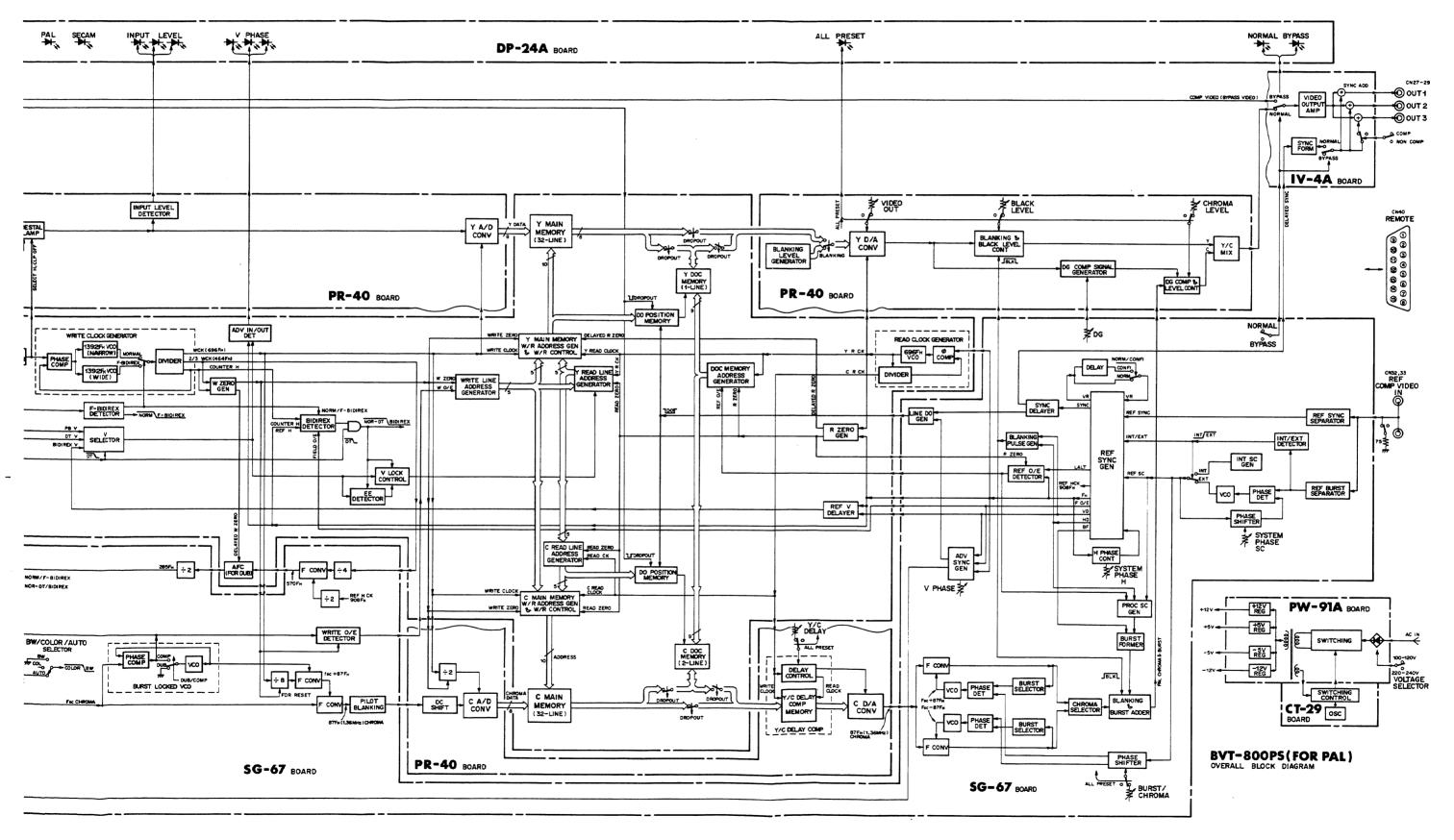


IV-4A Board - component side

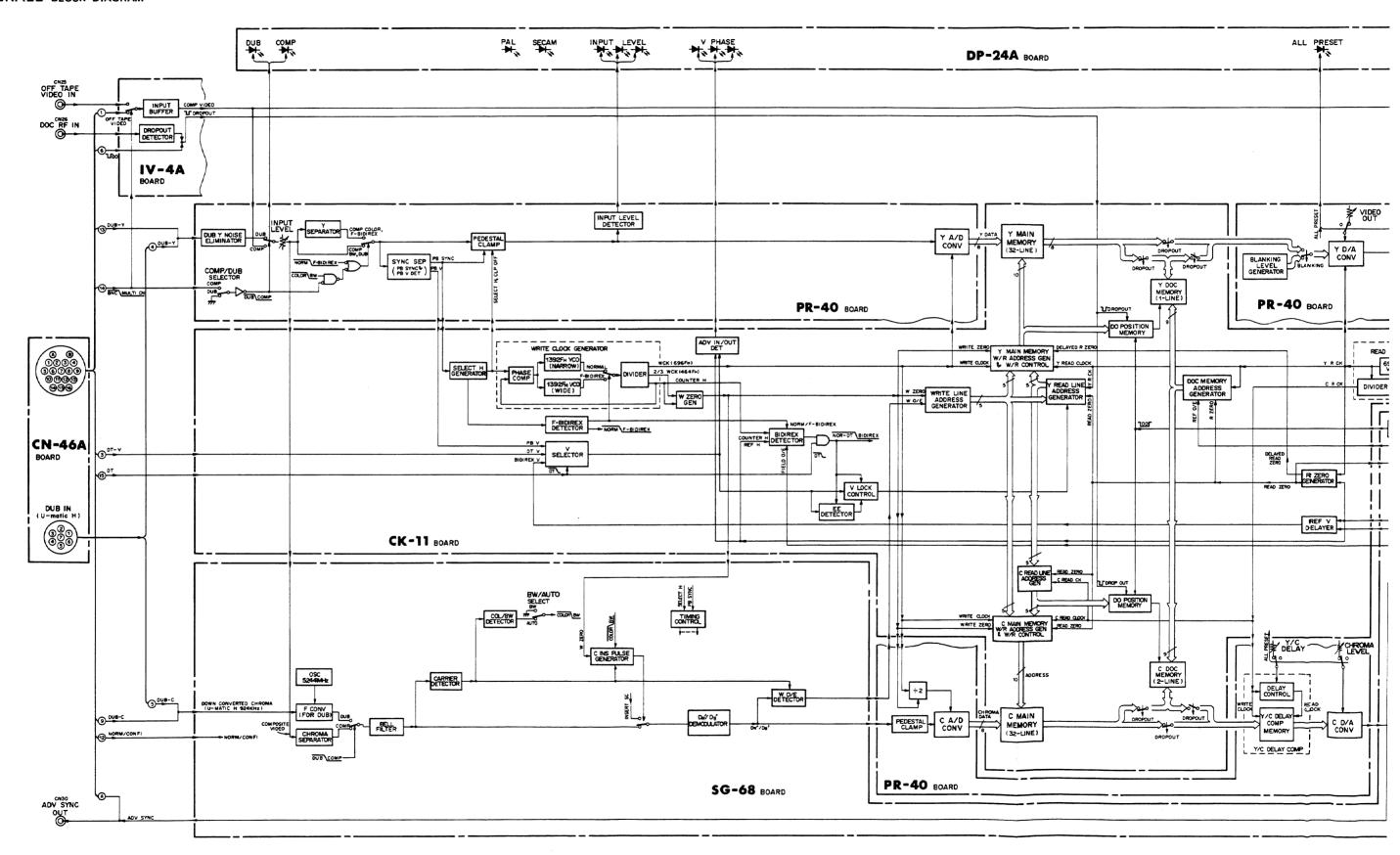
SECTION A BLOCK DIAGRAM

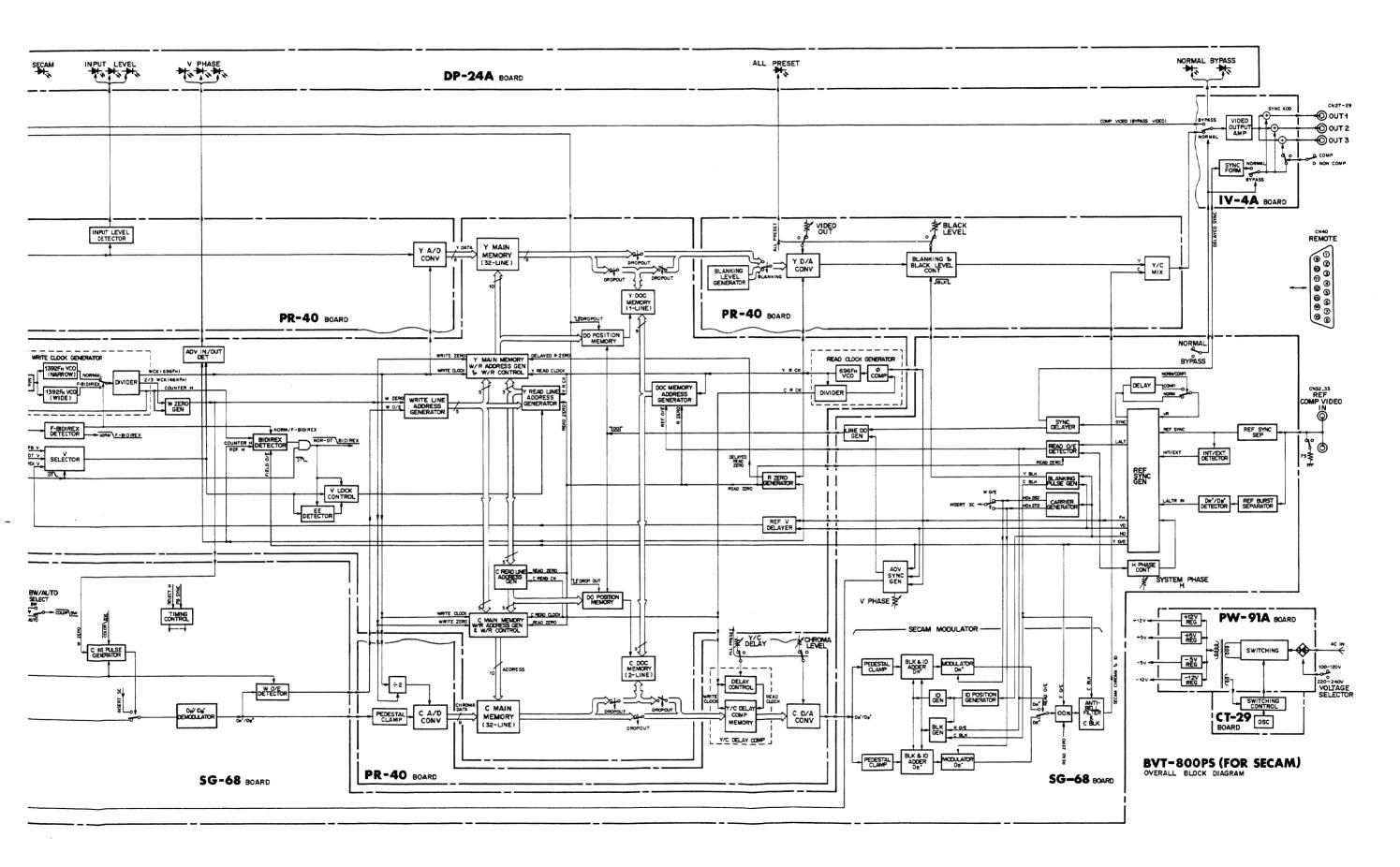
PAL OVERALL BLOCK DIAGRAM





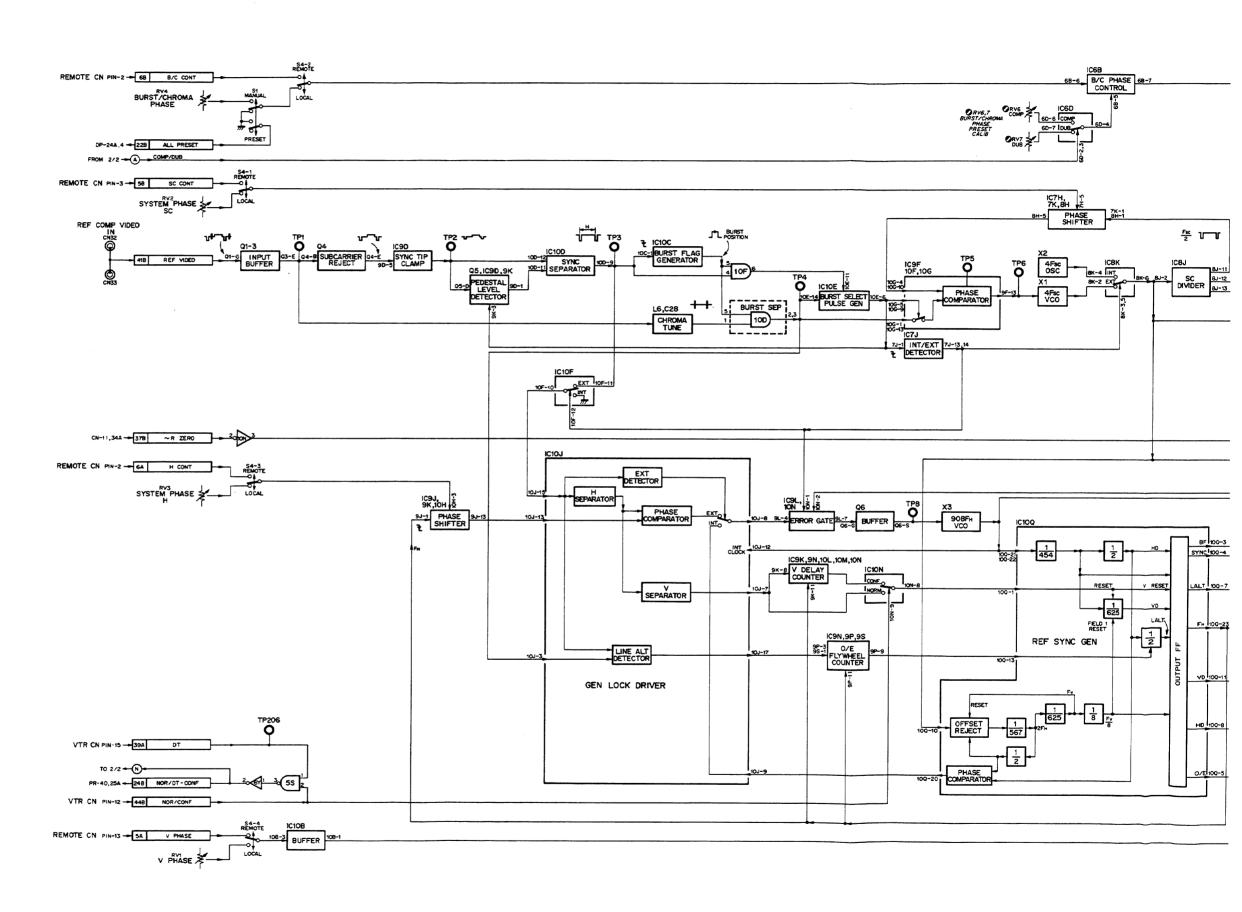
SECAM OVERALL BLOCK DIAGRAM

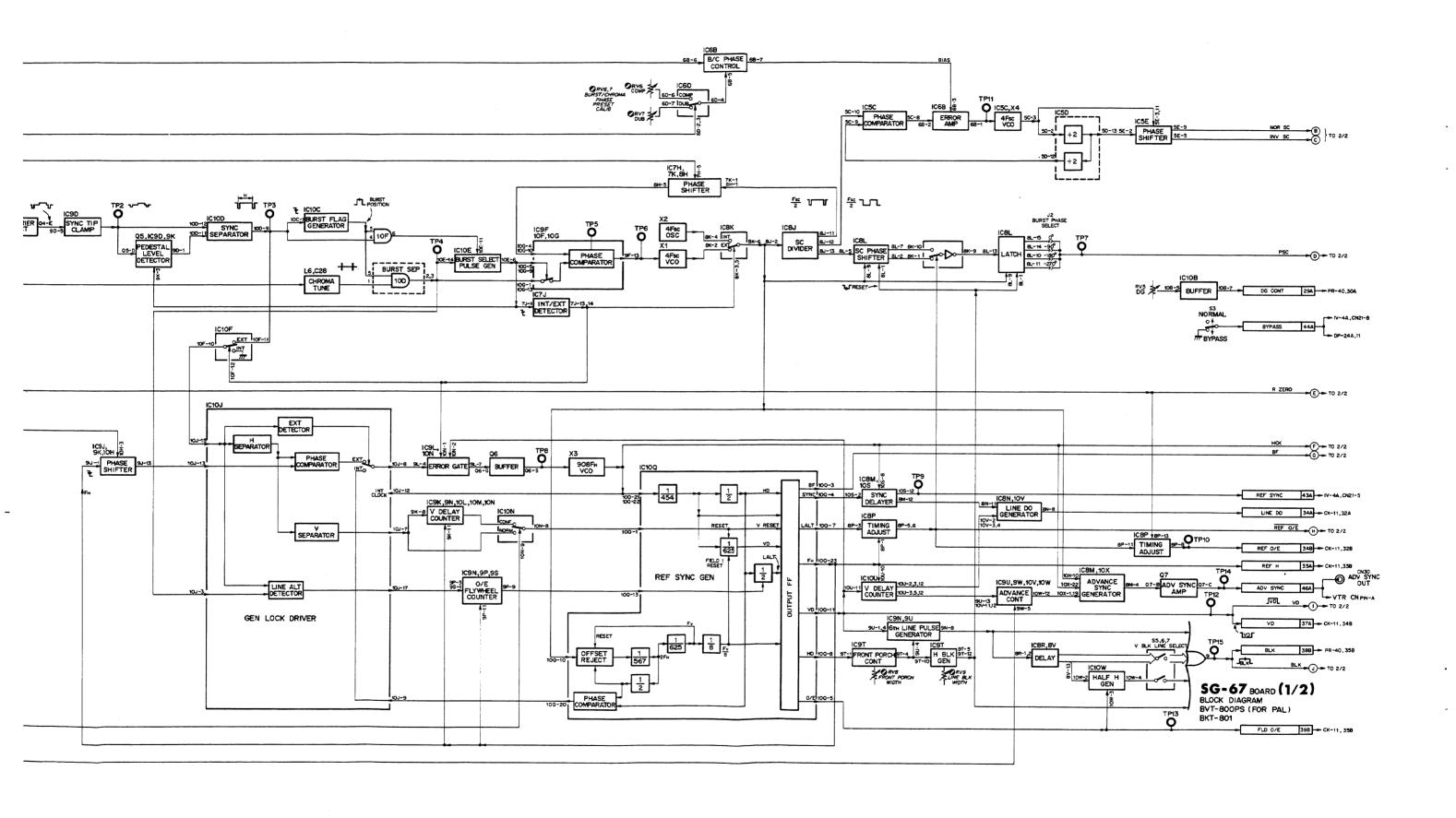




1 SG-67 BOARD (1/2); PAL SYNC GEN

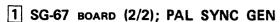
Reference Sync Generator Advanced Sync Generator Blanking Pulse Generator Line DO Pulse Generator Proc SC Generator Burst/Chroma Phase Control SC Phase Control System Phase Control V Phase Control

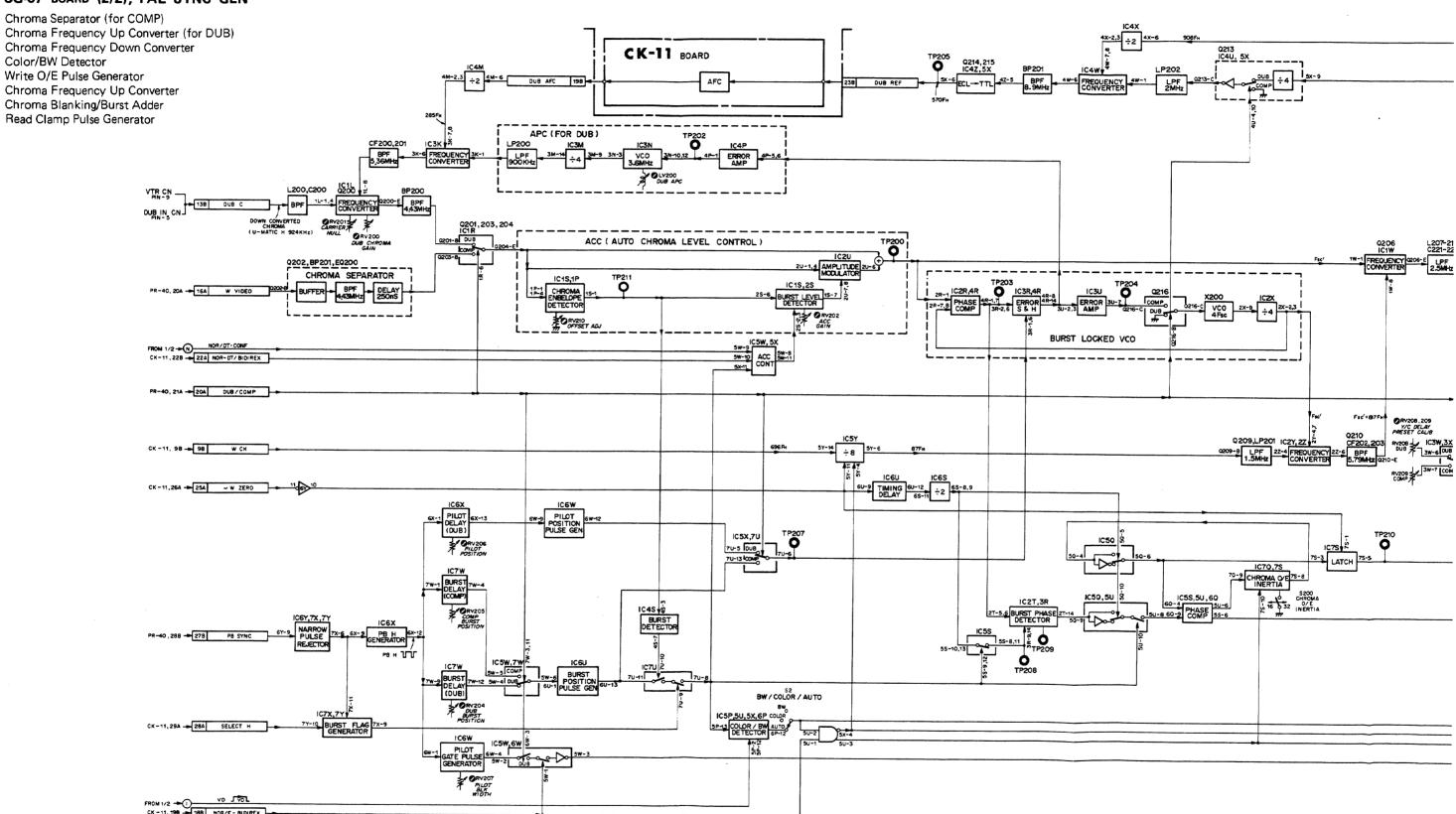




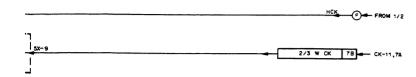
A-11 (BVT-800PS) A-5 (BKT-801)

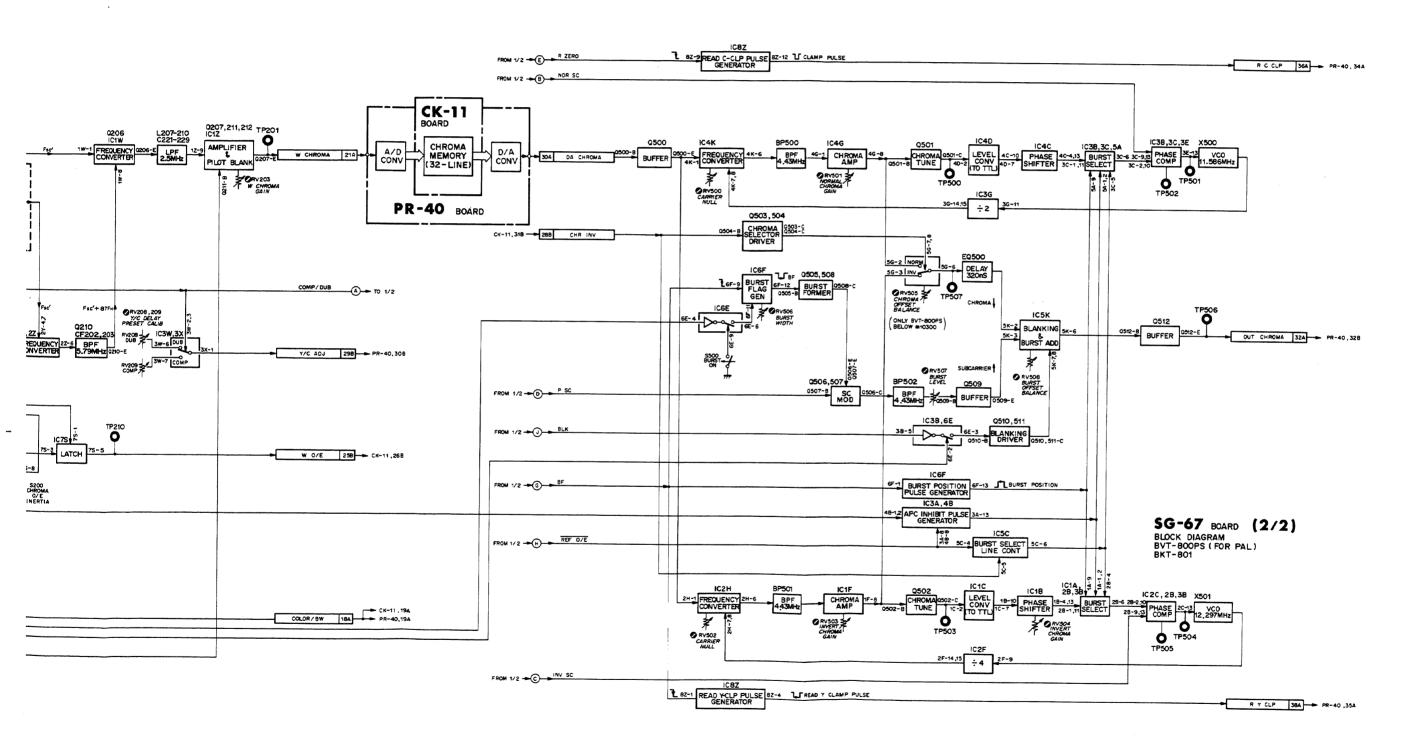
A-12 (BVT-800PS) A- 6 (BKT-801)





A-13 (BVT-800PS) A-7 (BKT-801) A-14 (BVT-800PS) A-8 (BKT-801)

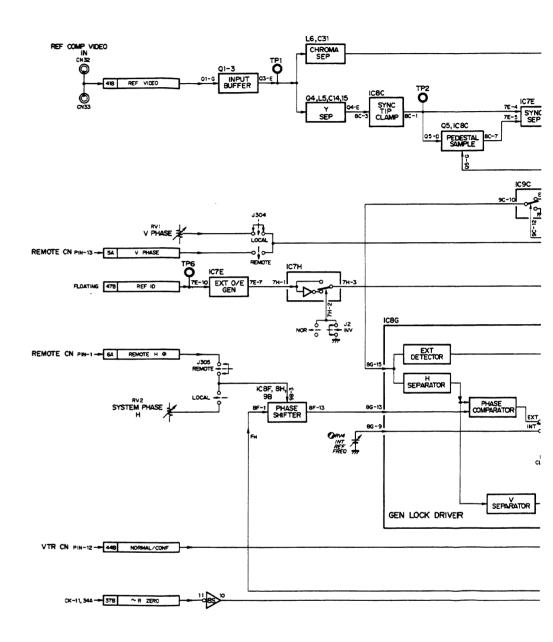




A-15 (BVT-800PS) A-9 (BKT-801) A-16 (BVT-800PS) A-10 (BKT-801)

1 SG-68 BOARD (1/2); SECAM SYNC GEN

Reference Sync Generator Advanced Sync Generator Blanking Pulse Generator Line DO Pulse Generator Read Y Clamp Pulse Generator System Phase Control V Phase Control



A-19 (BVT-800PS) A- 7 (BKT-802)

PEDESTAL SAMPLE

EXT DETECTOR

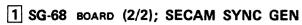
GEN LOCK DRIVER

A-20 (BVT-800PS) A-8 (BKT-802)

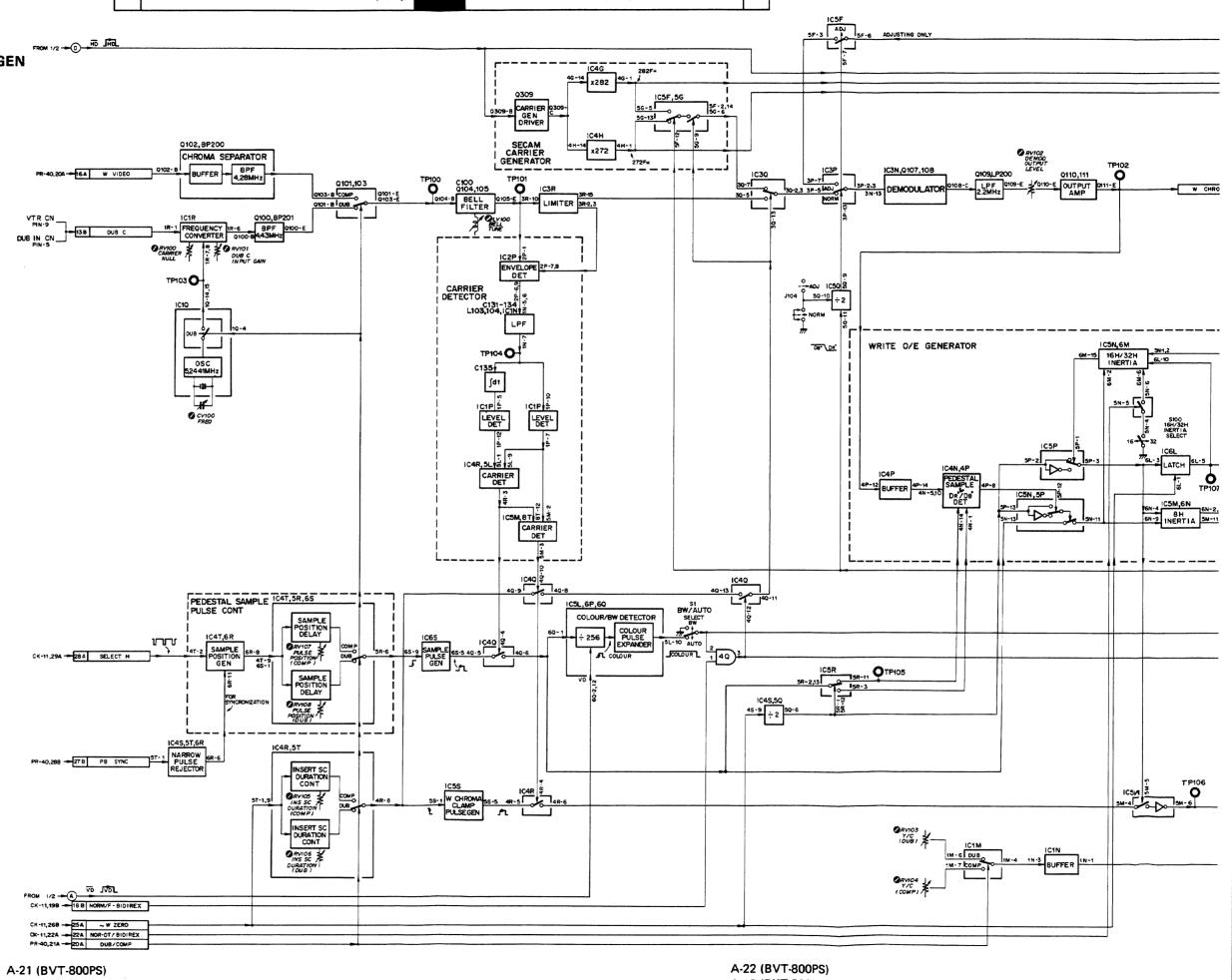
C BLK-1 G = TO 2/2

ID POSITION H TO 2/2

SG-68 BOARD (1/2) BLOCK DIAGRAM BVT-800PS (FOR SECAM) BKT-802

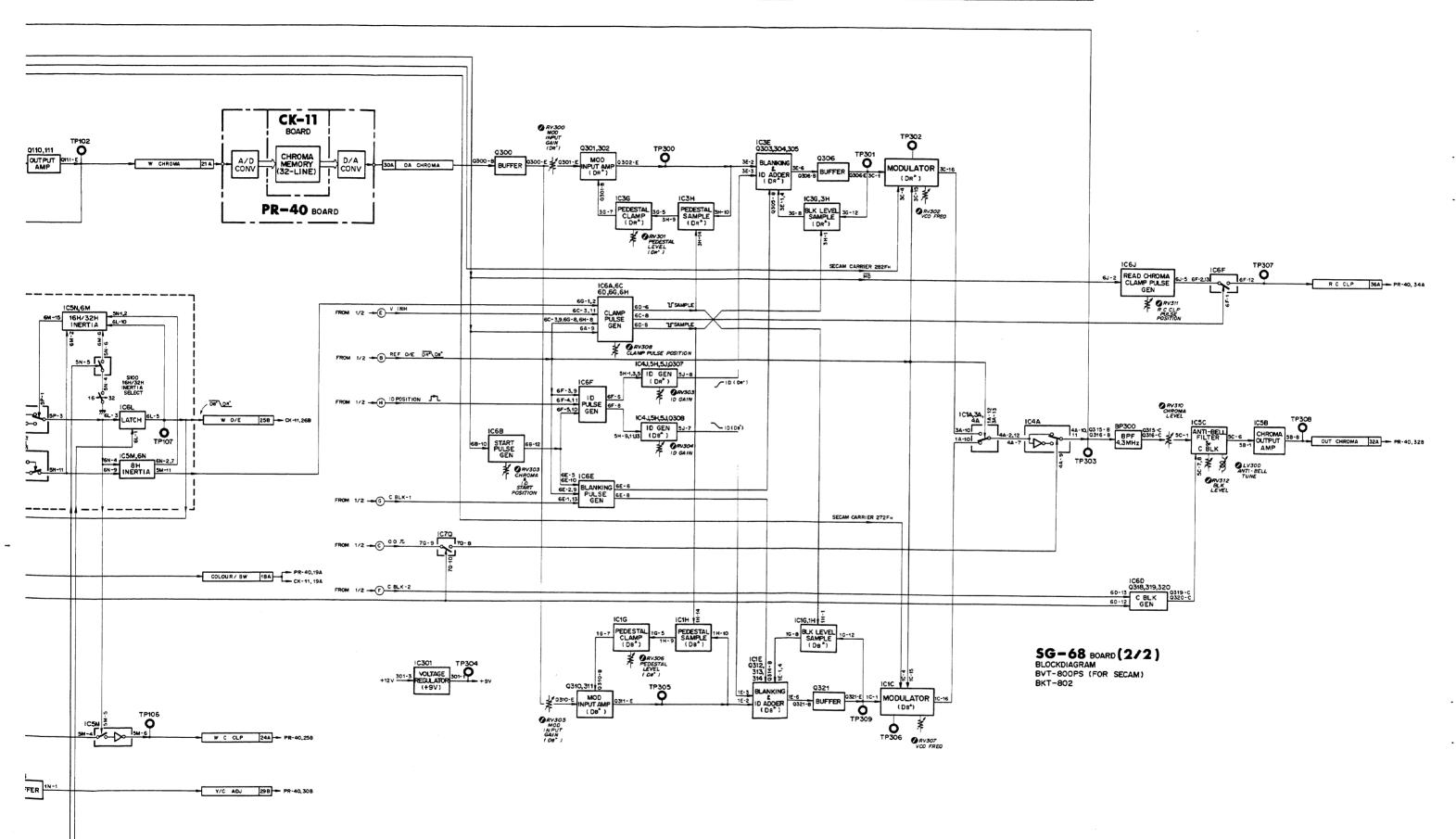


Chroma Separator (for COMP) Chroma Frequency Up Converter (for DUB) DR'/DB' Demodulator SECAM Carrier Detector Chroma Insert Pulse Generator Write O/E Pulse Generator Color/BW Detector Write Chroma Clamp Pulse Generator



A-9 (BKT-802)

A-10 (BKT-802)



A-23 (BVT-800PS) A-11 (BKT-802)

A-24 (BVT-800PS) A-12 (BKT-802)

2 PR-4

DUB 'Input Y Col-PB V, Y A-E Input C A-D

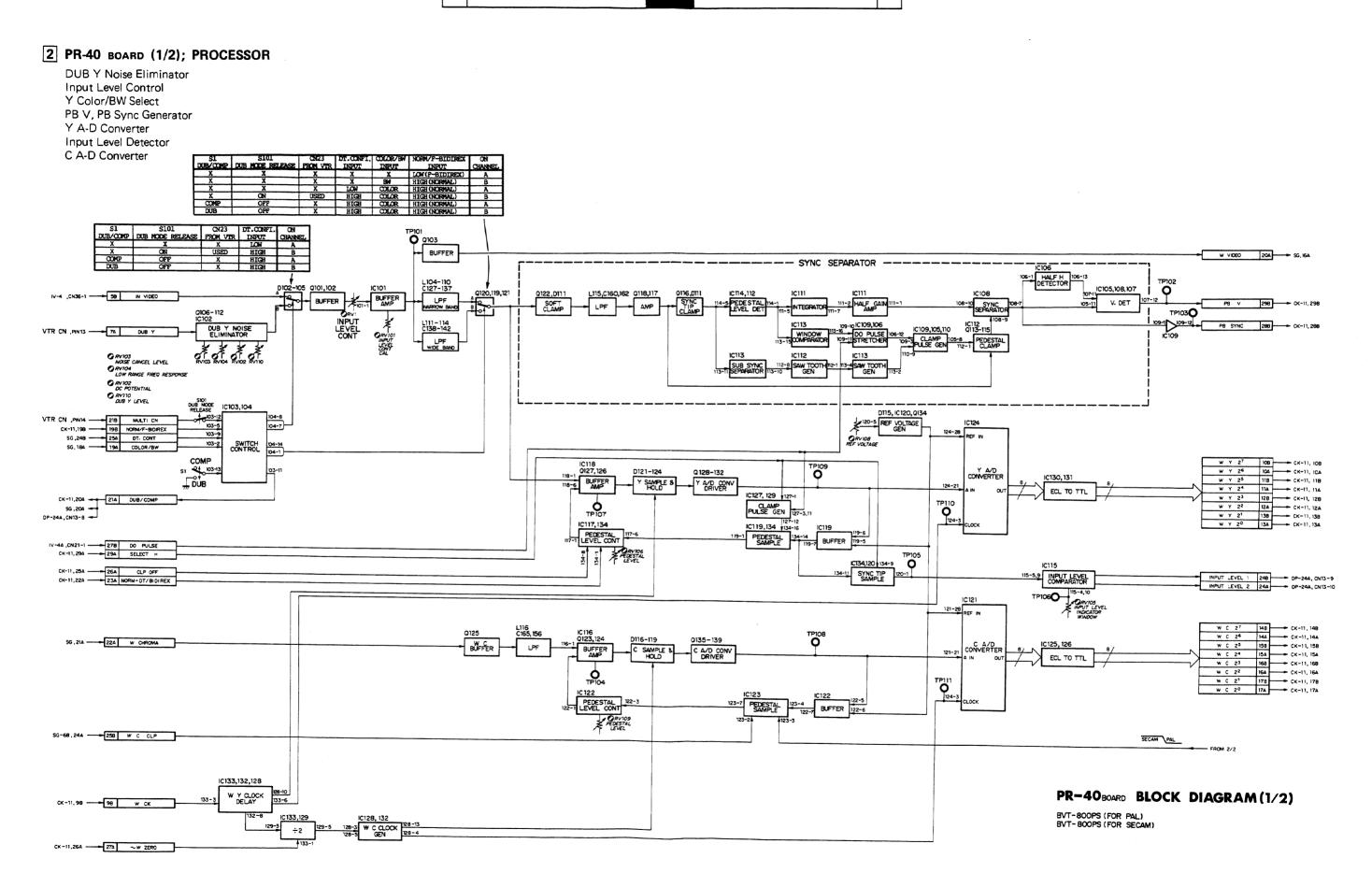
VTR CN ,PIN 13 -

VTR CN ,PIN14 —
CK-11,198 —
SG,248 —
SG,184 —

CK-11,20A →
SG,20A →
DP-24A,CN13-8 →

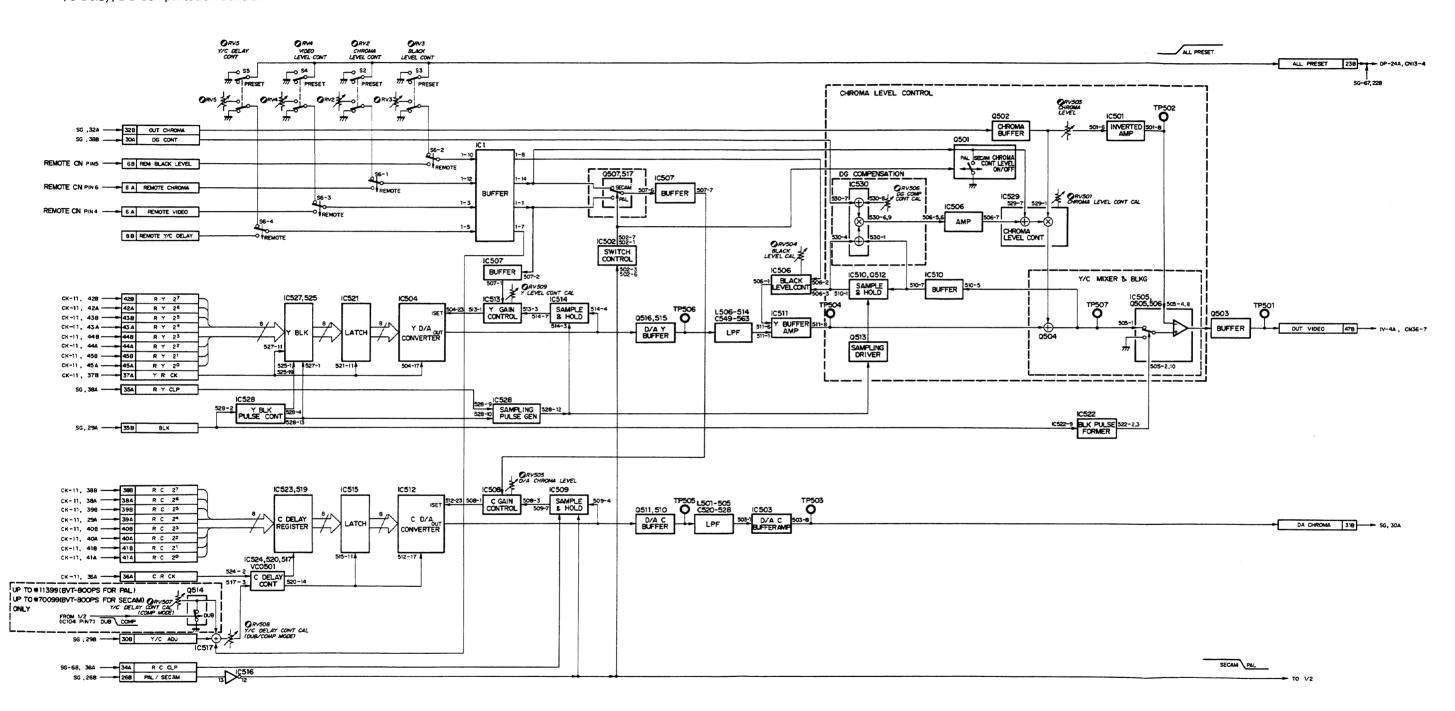
IV-4A ,CN21-1 --CK-11,29A --

CK-11,25A --CK-11,22A --



2 PR-40 BOARD (2/2); PROCESSOR

Y D-A Converter C D-A Converter Video, Chroma, Black Level Control Y/C Delay, DG Compensation Control



PR-40 BOARD BLOCK DIAGRAM (2/2)

BVT-800PS (FOR PAL) BVT-800PS (FOR SECAM)

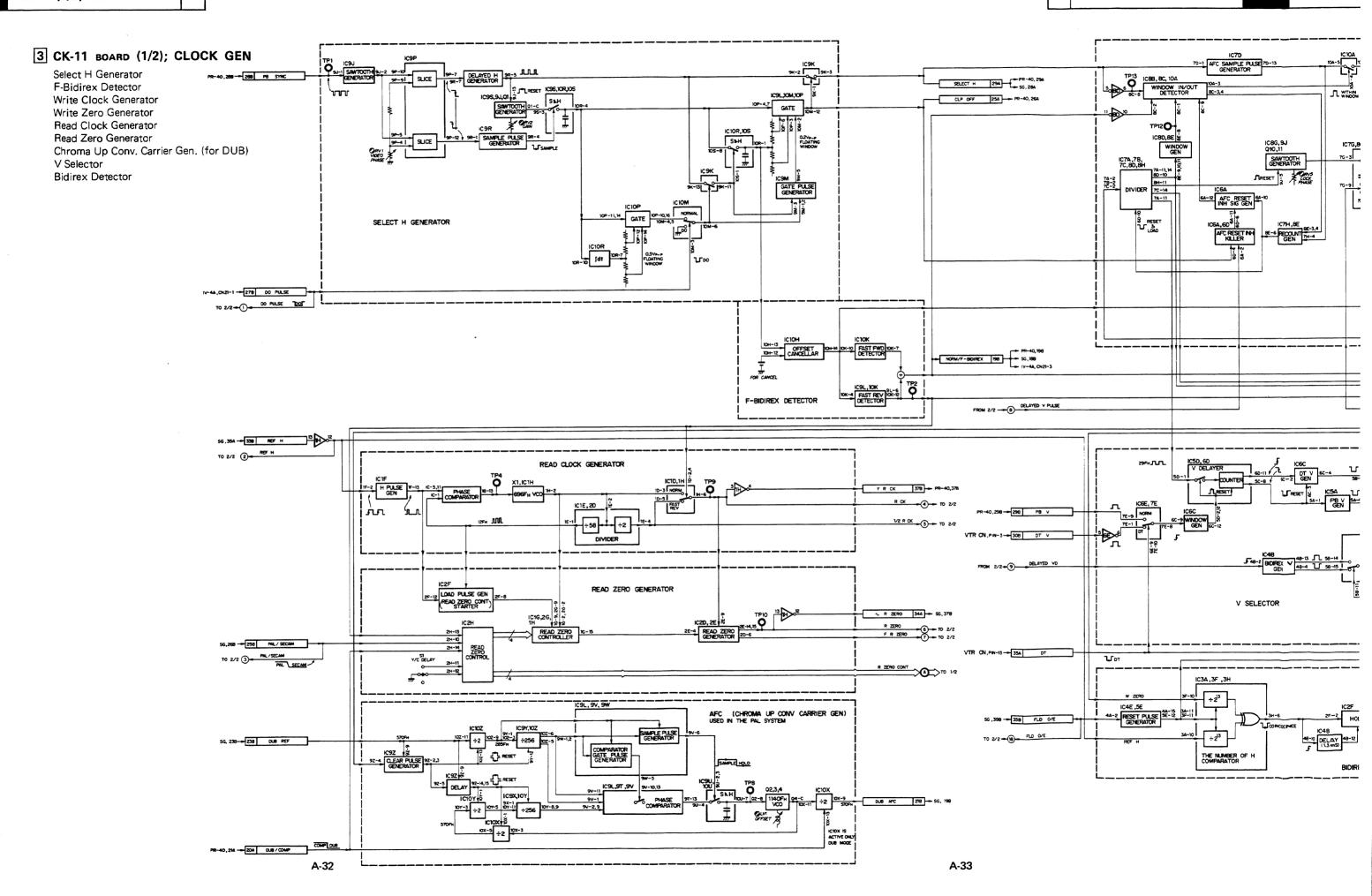
A-29

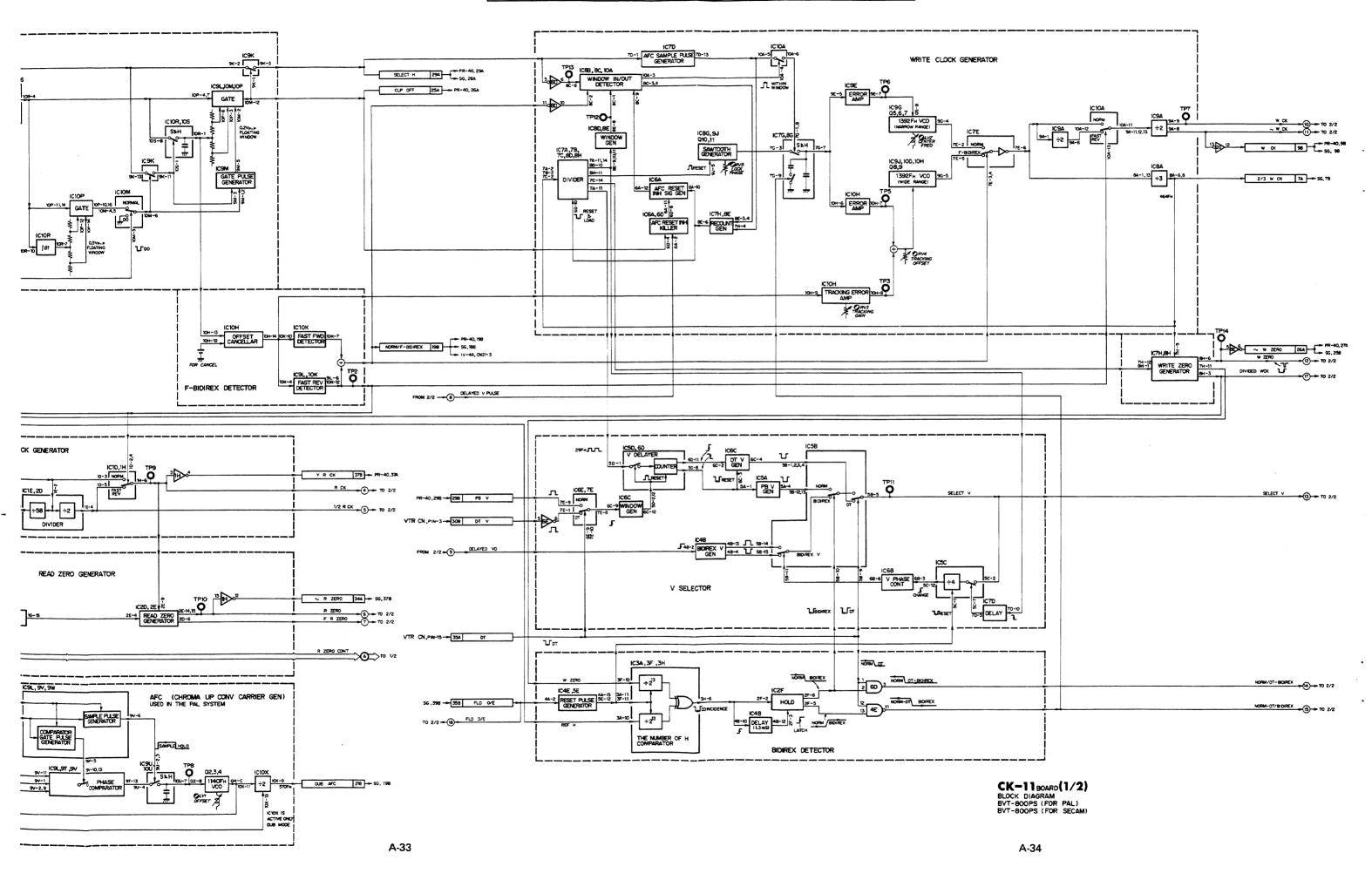


PR-40 BOARD BLOCK DIAGRAM (2/2)

SECAM PAL

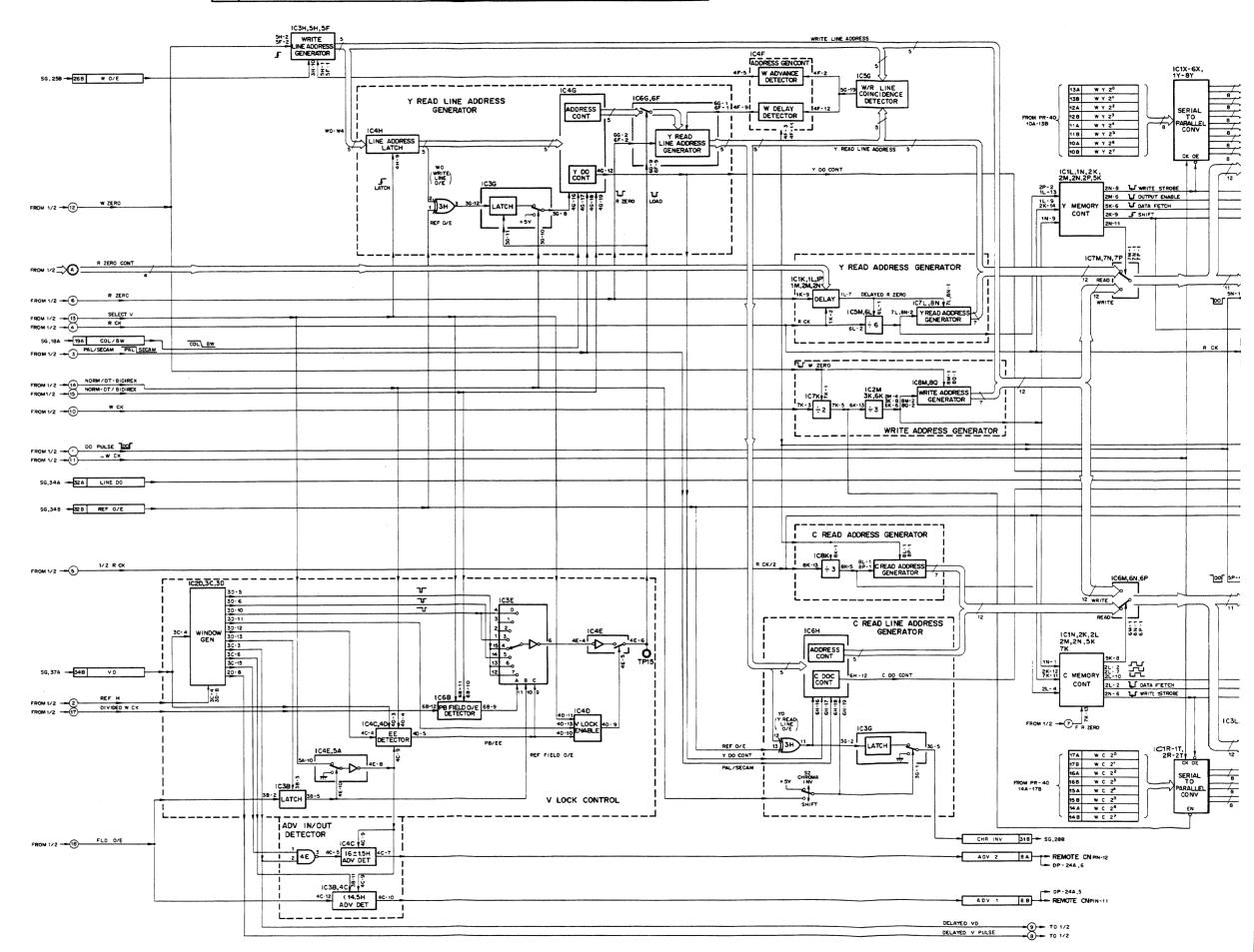
BVT-800PS (FOR PAL) BVT-800PS (FOR SECAM)

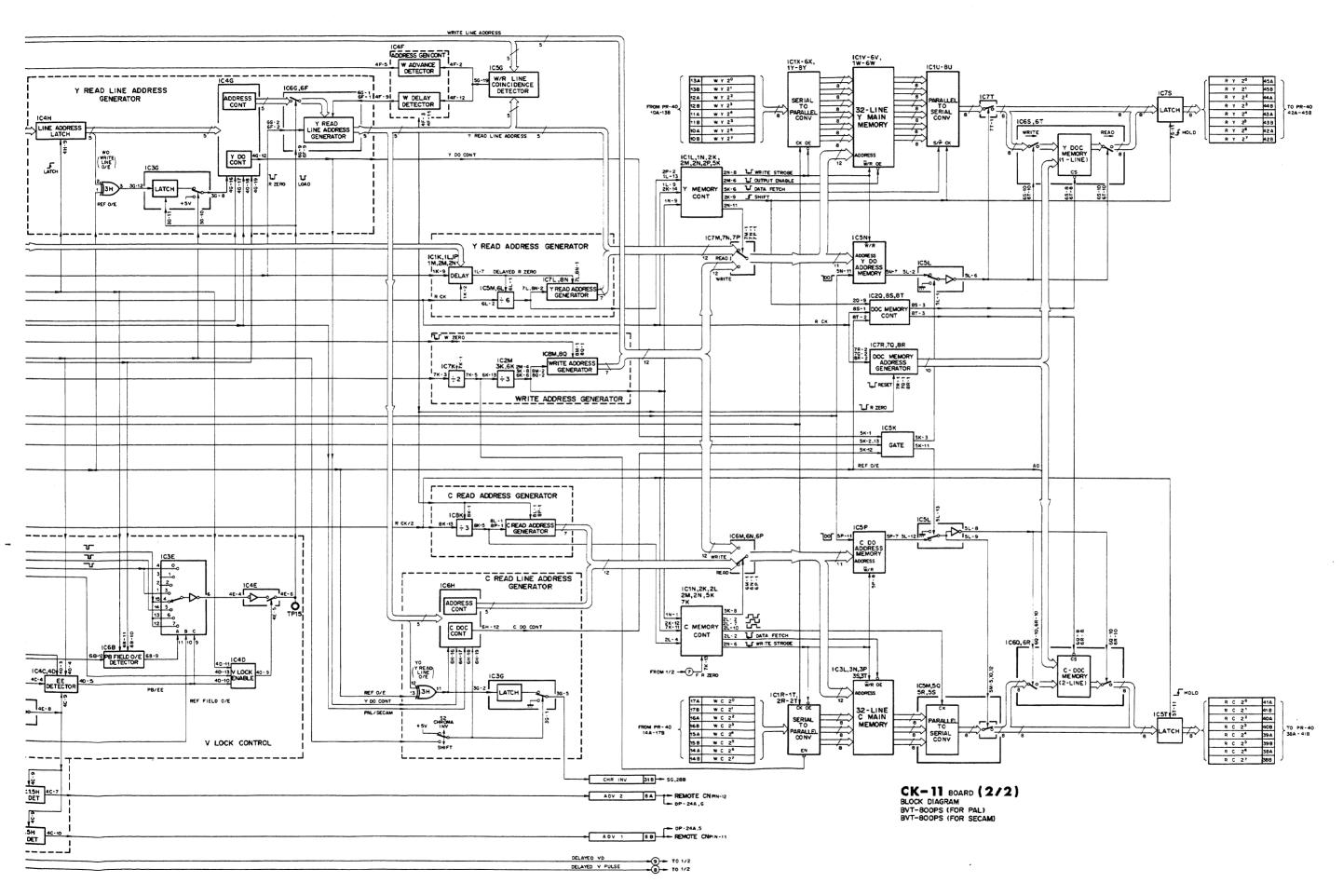




3 CK-11 BOARD (2/2); CLOCK GEN

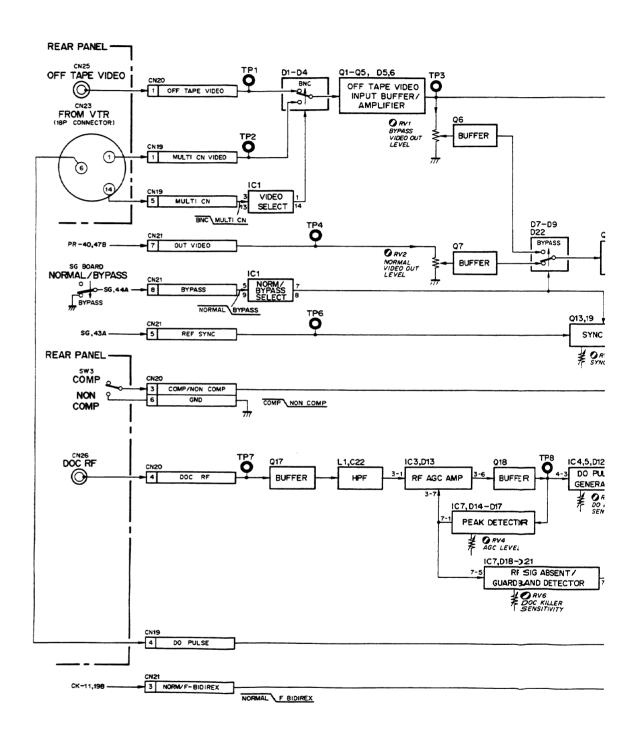
W/R Line Address Generator Advance Detector EE Detector Main Memory W/R Address Generator 32-Line Main Memory DOC Memory





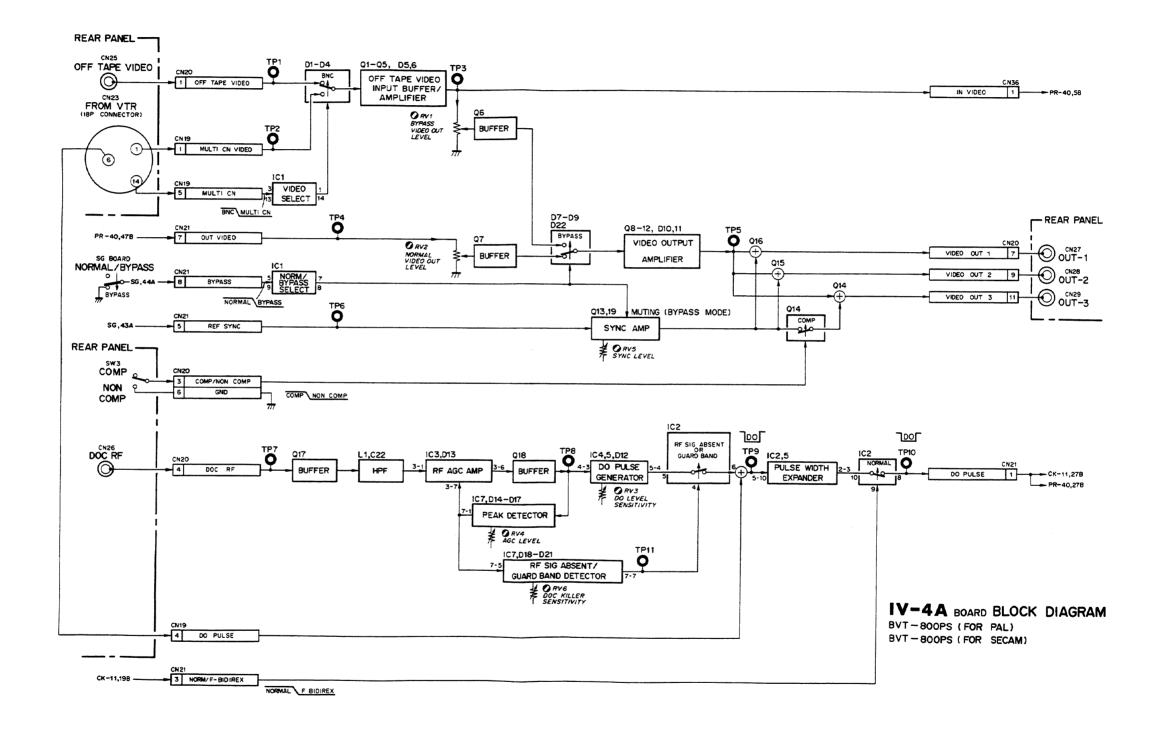
IV-4A BOARD

Video Input Buffer Video Output Buffer DO Pulse Generator



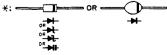
IV-4A BOARD

Video Input Buffer Video Output Buffer DO Pulse Generator



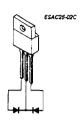
SECTION B SEMICONDUCTOR PIN ASSIGNMENTS

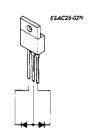
B-3 B-3 B-3 B-3 B-4 B-5 B-5 B-5 B-6 B-6 B-6 B-6 B-6 B-6 B-6 B-7 B-8	NJM4558D B-9 NJM4560D B-9 QSCH-1754 * RD3.9E * RD4.7E * RD5.1E * RD6.2E * RD9.1E * RD12E * RD15E * RD16E * SN74LS00N B-9 SN74LS04N B-9 SN74LS04N B-9 SN74LS04N B-9 SN74LS08N B-10 SN74LS08N B-10 SN74LS10N B-10	SN74LS273NB-14 SN74LS365ANB-15 SN74LS367ANB-15 SN74LS374NB-15 SN74LS397NB-15 SN74LS399NB-15 SN74LS423NB-16 SN74LS669NB-16 SN74LS669NB-16 SN74LS684NB-16 SN74LS684NB-16 TA7060APB-17 TC4012BPB-17 TC4020BPB-17
B-3 B-4 B-5 B-5 B-5 B-6 IAB-6 IZZ* WAS* USCB-2 UZNB-2 B-2	NJM4560DB-9 QSCH-1754* RD3.9E* RD4.7E* RD5.1E* RD6.2E* RD9.1E* RD12E* RD15E* RD15E* SN74LS00NB-9 SN74LS04NB-9 SN74LS04NB-9 SN7406NB-9 SN7407NB-10	SN74LS367ANB-15 SN74LS377NB-15 SN74LS397NB-15 SN74LS399NB-15 SN74LS423NB-16 SN74LS669NB-16 SN74LS669NB-16 SN74LS684NB-16 SN74LS684NB-16 SN75207BNB-17 TA7060APB-17 TBP28S42NB-20
B-4 B-5 B-5 B-5 B-5 B-6 B-6 A B-6 B-6 B-6 B-6 B-6 B-7 B-8	RD3.9E	SN74LS367ANB-15 SN74LS377NB-15 SN74LS397NB-15 SN74LS399NB-15 SN74LS423NB-16 SN74LS669NB-16 SN74LS669NB-16 SN74LS684NB-16 SN74LS684NB-16 SN75207BNB-17 TA7060APB-17 TBP28S42NB-20
B-4 B-5 B-5 B-5 B-5 B-6 B-6 A B-6 B-6 B-6 B-6 B-6 B-7 B-8	RD3.9E	SN74LS367AN
B-4 B-5 B-5 B-5 B-5 B-6 B-6 A B-6 B-6 B-6 B-6 B-6 B-7 B-8	RD3.9E	SN74LS374N
B-4 B-5 B-5 B-5 B-6 B-6 B-6 B-6 B-6 B-6 B-7 B-6 B-7 B-8	RD4.7E. * RD5.1E. * RD5.1E. * RD6.2E. * RD9.1E. * RD12E. * RD15E. * RD16E. * SN74LS00N. B-9 SN74LS02N. B-9 SN74LS04N. B-9 SN7406N. B-9 SN7407N. B-10 SN74LS08N. B-10	SN74LS377NB-1! SN74LS393NB-1! SN74LS399NB-1! SN74LS423NB-16 SN74LS669NB-16 SN74LS670NB-16 SN74LS684NB-16 SN75207BNB-17 TA7060APB-17 TBP28S42NB-20 TC4012BPB-17 TC4020BPB-17
B-5 B-5 B-5 B-5 B-6 B-6 B-6 B-6 B-6 B-6 B-6 B-6 B-6 B-6	RD4.7E. * RD5.1E. * RD5.1E. * RD6.2E. * RD9.1E. * RD12E. * RD15E. * RD16E. * SN74LS00N. B-9 SN74LS02N. B-9 SN74LS04N. B-9 SN7406N. B-9 SN7407N. B-10 SN74LS08N. B-10	SN74LS393NB-11 SN74LS399NB-11 SN74LS423NB-16 SN74LS669NB-16 SN74LS669NB-16 SN74LS684NB-16 SN75207BNB-17 TA7060APB-17 TBP28S42NB-20 TC4012BPB-17 TC4020BPB-17
B-5 B-5 B-5 B-5 B-6 B-6 B-6 B-6 B-6 B-6 B-6 B-6 B-6 B-6	RD5.1E* RD6.2E* RD9.1E* RD12E* RD15E* RD16E* SN74LS00NB-9 SN74LS04NB-9 SN74LS04NB-9 SN7406NB-9 SN7407NB-10	SN74LS399NB-15 SN74LS423NB-16 SN74LS669NB-16 SN74LS670NB-16 SN74LS684NB-17 TA7060APB-17 TBP28S42NB-17 TC4012BPB-17
B-5 B-5 B-5 B-6 B-6 B-6 B-6 B-6 B-6 B-6 B-6 B-6 B-6	RD6.2E* RD9.1E* RD12E* RD15E* RD16E* SN74LSOONB-9 SN74LSO2NB-9 SN74LSO4NB-9 SN74LSO4NB-9 SN74O6NB-9 SN74O6NB-10	SN74LS423NB-16 SN74LS669NB-16 SN74LS67ONB-16 SN74LS684NB-16 SN75207BNB-17 TA7060APB-17 TBP28S42NB-20 TC4012BPB-17 TC4020BPB-17
B-5 B-6 IAB-6	RD9.1E* RD12E* RD15E* RD16E* SN74LSOONB-9 SN74LSO2NB-9 SN74LSO4NB-9 SN74LSO4NB-9 SN74O6NB-9 SN74O5NB-10	SN74LS423NB-16 SN74LS669NB-16 SN74LS670NB-16 SN74LS684NB-16 SN75207BNB-17 TA7060APB-17 TBP28S42NB-20 TC4012BPB-17 TC4020BPB-17
B-5 IB-6 IAB-6 IA	RD12E* RD15E* RD16E* SN74LSOONB-9 SN74LSO2NB-9 SN74LSO4NB-9 SN74LSO4NB-9 SN74O6NB-10 SN74LSO8NB-10	SN74LS669NB-16 SN74LS670NB-16 SN74LS684NB-16 SN75207BNB-17 TA7060APB-17 TBP28S42NB-20 TC4012BPB-17 TC4020BPB-17
# # # # # # # # # # # # # # # # # # #	RD15E* RD16E* SN74LS00NB-9 SN74LS02NB-9 SN74LS04NB-9 SN7406NB-9 SN7406NB-10	SN74LS670NB-16 SN74LS684NB-16 SN75207BNB-17 TA7060APB-17 TBP28S42NB-20 TC4012BPB-17 TC4020BPB-17
1AB-6 22* 14S* 16S* 108S* 102CB-2 102NB-2	RD15E* RD16E* SN74LS00NB-9 SN74LS02NB-9 SN74LS04NB-9 SN7406NB-9 SN7406NB-10	SN74LS684NB-16 SN75207BNB-17 TA7060APB-17 TBP28S42NB-20 TC4012BPB-17 TC4020BPB-17
1AB-6 22* 14S* 16S* 108S* 102CB-2 102NB-2	RD16E* SN74LS00NB-9 SN74LS02NB-9 SN74LS04NB-9 SN7406NB-9 SN7407NB-10	SN75207BNB-17 TA7060APB-17 TBP28S42NB-20 TC4012BPB-17 TC4020BPB-17
22B-6 12Z* 14S* 16S* 12CB-2 12NB-2	SN74LS00NB-9 SN74LS02NB-9 SN74LS04NB-9 SN7406NB-9 SN7407NB-10	TA7060APB-17 TBP28S42NB-20 TC4012BPB-17 TC4020BPB-17
12Z* 14S* 16S* 18S* 12CB-2 12NB-2	SN74LS02NB-9 SN74LS04NB-9 SN7406NB-9 SN7407NB-10	TA7060APB-17 TBP28S42NB-20 TC4012BPB-17 TC4020BPB-17
045 * 065 * 085 * 020B-2 02NB-2	SN74LS02NB-9 SN74LS04NB-9 SN7406NB-9 SN7407NB-10	TA7060APB-17 TBP28S42NB-20 TC4012BPB-17 TC4020BPB-17
045 * 065 * 085 * 020B-2 02NB-2	SN74LS02NB-9 SN74LS04NB-9 SN7406NB-9 SN7407NB-10	TBP28S42NB-20 TC4012BPB-17 TC4020BPB-17
045 * 065 * 085 * 020B-2 02NB-2	SN74LS04NB-9 SN7406NB-9 SN7407NB-10 SN74LS08NB-10	TBP28S42NB-20 TC4012BPB-17 TC4020BPB-17
065 * 085 * 02CB-2 02NB-2	SN7406NB-9 SN7407NB-10 SN74LS08NB-10	TC4012BPB-17
985* 920B-2 92NB-2B-2	SN7407NB-10 SN74LS08NB-10	TC4012BPB-17
02CB-2 02NB-2 B-2	SN74LS08NB-10	TC4020BPB-17
02N8-2 8-2		TC4020BPB-17
02N8-2 8-2		
B-2	SN/4LS10NB-10	
		TC4040BPB-17
	SN74LS11NB-10	
	SN74LS14NB-10	TL082CPB-17
1B-6	SN74LS20NB-10	TL084CNB-17
		TL494CNB-18
3GSB-6	SN74LS30NB-10	TL601CPB-18
	SN74LS32NB-10	TL607CPB-18
)5B-6	SN7438NB-11	TL701CPB-18
	SN74S51NB-11	72.0.0.00000000000000000000000000000000
2B-6	SN74LS51NB-11	TLR124B-2
7B-6	31174233111000000000000000000000000000000000	ILN:24
5B-6	SN7474NB-11	U15G*
	SN74LS74ANB-11	0196
B-7		110107E #
B-7	SN74S86NB-11	US1035*
	SN74LS86NB-11	
)-5B-7	SN74S113NB-11	UA760HCB-18
B-7		MC1496GB-18
	SN74LS113NB-11	
B-2	SN74LS114ANB-11	UPC71AB-18
IB-2	SN74LS123NB-11	UPC319CB-19
	SN74S133NB-12	UA324CB-19
		UPC4082CB-17
'B-7		UPC4557CB-19
	SN74LS157N	UPC4558CB-9
8-10		0. 043300
**********	CN74LS150Neeeee00012	V111 🐸
	0117416711 0 10	V11L
•••••• •		
	SN/4L5163ANB-12	
L-55B-8		
••••B-8		
LB-6	SN74S175NB-13	
LB-7	SN74LS175NB-13	
	SN74LS191NB-14	
-12RSB-8		
1 1 5 5 5 5	B-2 B-2 B-7 B-19 B-8 B-8 B-8 B-8 B-8 B-8 B-8 B-8 B-8 B-7 B-12RS B-8 B-8 B-12RS B-8	SN74LS123NB-11 SN74LS151NB-12 SN74LS151NB-12 SN74LS157NB-12 SN74LS158NB-12 SN74LS161ANB-12 SN74LS163NB-12 SN74LS163NB-12 SN74LS163NB-13 SN74LS166ANB-13 SN74LS174NB-13 SN74LS174NB-13 SN74LS175NB-13 SN74LS175NB-13 SN74LS175NB-13 SN74LS175NB-13 SN74LS175NB-13 SN74LS175NB-13 SN74LS175NB-13 SN74LS175NB-13





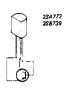


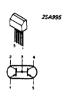


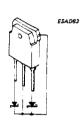








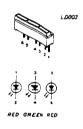


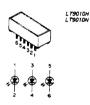








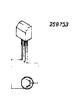


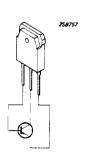




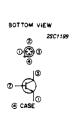


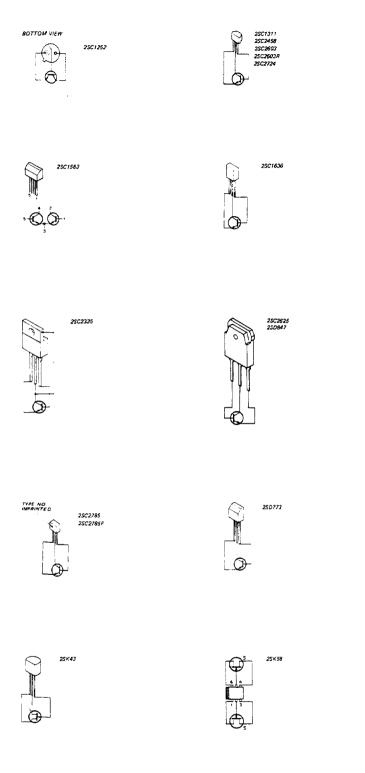


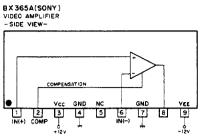


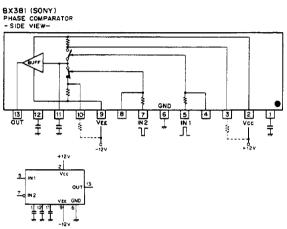


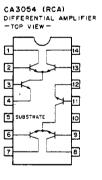




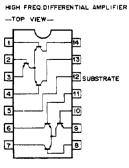


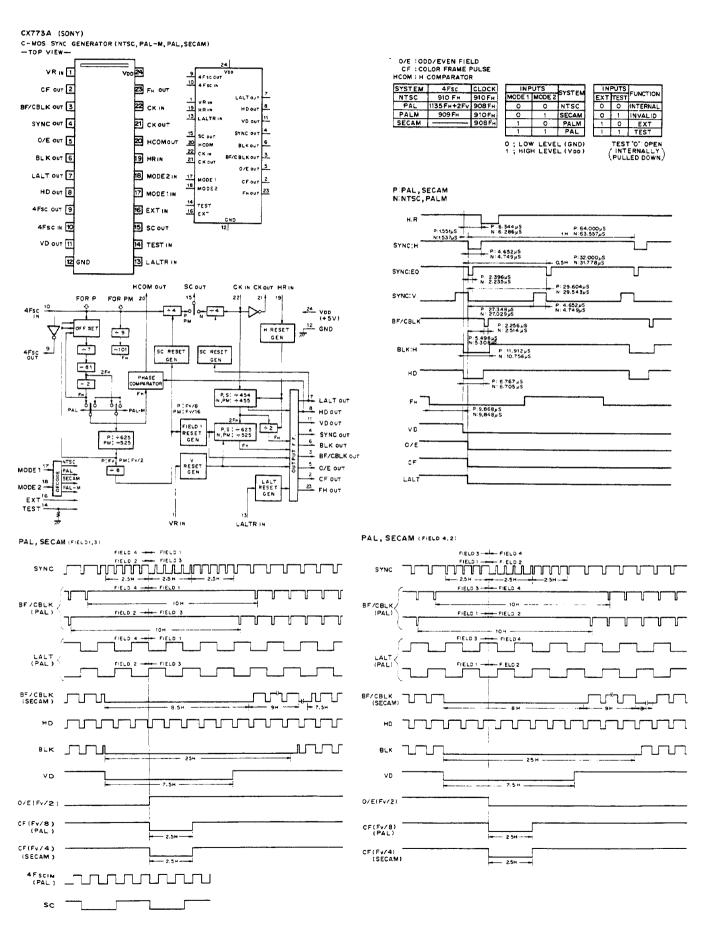




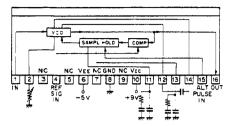


CA3102E(RCA)

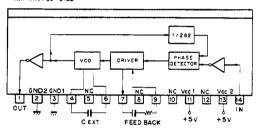




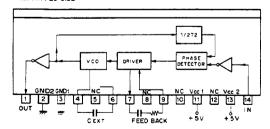
CX852 (SONY)
FREQUENCY MODULATOR
-IMPRINTED SIDE +



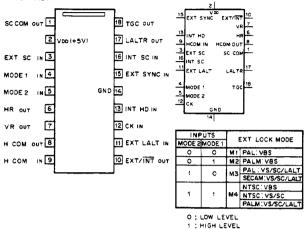
CX854 (SONY) 282-TIME MULTIPLIER -IMPRINTED SIDE +



CX855 (SONY) 272-TIME MULTIPLIER -IMPRINTED SIDE-



CX7903 (SONY)
CMOS GENLOCK DRIVER FOR CX773A
— TOP VIEW— SC COM OUT 18 TGC OUT



EXT SYNC -15 EXT/INT DETECTOR 10 EXT/INT FH, FV SEPARATOR 6-HR - ноом HCOM -9 EXT SC-¹→ sc com INT SC-TIMING PULSE DET SQUARE WAVE OR PAL PULSE DETECTOR L ALTR GENERATOR 77- LALTR EXT LALT-MODE 1-DECODER

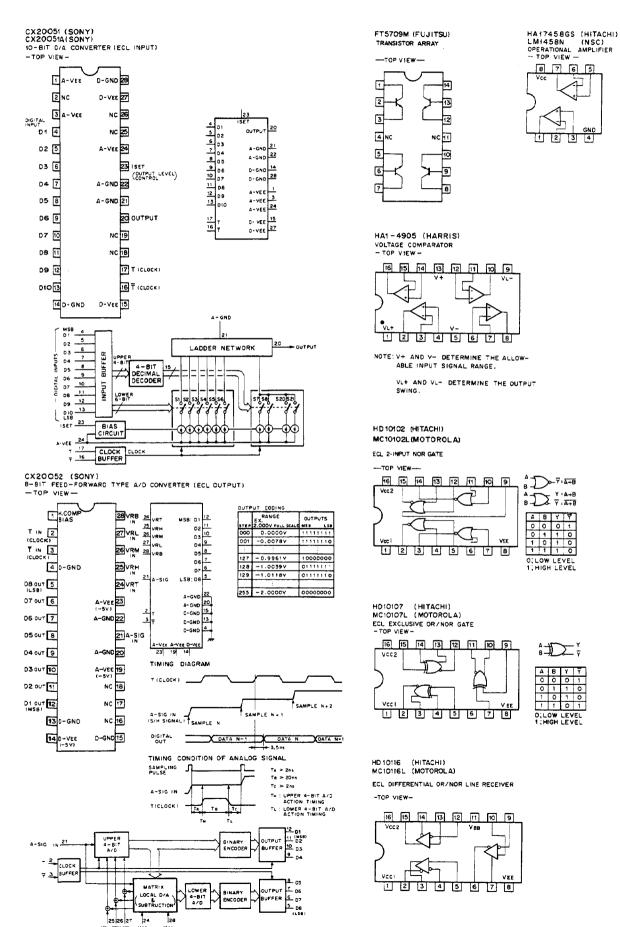
- CLOCK

14 GND

MODE 2-

CK(4Fsc) 12 (FROM CX773A)

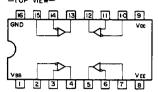
÷ 2



HD 10125 (HTTACHT) MC 10125L (MOTOROLA)

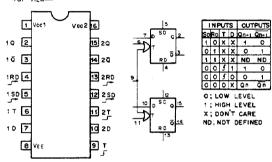
ECL ECL-TO-TTL TRANSLATOR

-TOP VIEW-

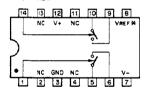


HD10131 (HITACHI) MC10131L (MOTOROLA) ECL D-TYPE FLIP FLOP





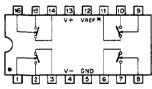
HI1-200-5 (HARRIS) C-MOS ANALOG SWITCH -TOP VIEW-



CONT	sw
0	ģ
1	حرم
	LEVEL

* NOTE	
INTERFACE	VREF CONNECTION
TŤL	OPEN
2	V00 ≤ 5.5V : OPEN
C-MOS	VDD > 5.5V : TO VDD

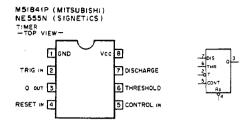
HI1-201 (HARRIS) C-MOS ANALOG SWITCH -TOP VIEW-



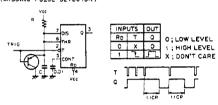
İ	CONT	sw
	0	\$
	1	~

O ; LOW LEVEL 1 ; HIGH LEVEL

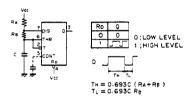
INTERFACE	VREF CONNECTION
TTL	OPEN
	V00 ≤ 5.5V ; OPEN
c-Mos	V00 > 5.5V ; TO V00



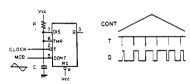
RETRIGGERABLE MONO. MULTIVIBRATOR (MISSING PULSE DETECTOR)



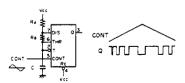
ASTABLE MULTIVIBRATOR

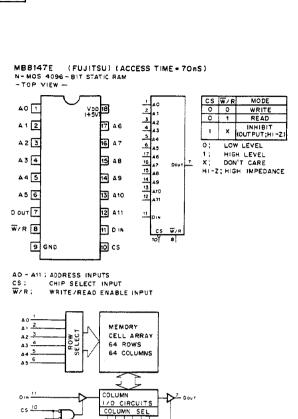


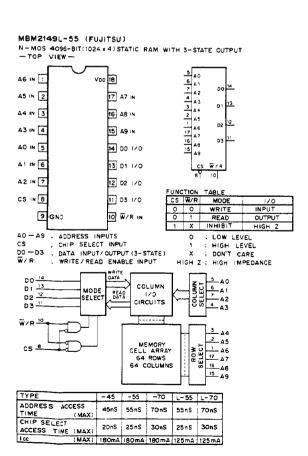
PULSE WIDTH MODULATOR

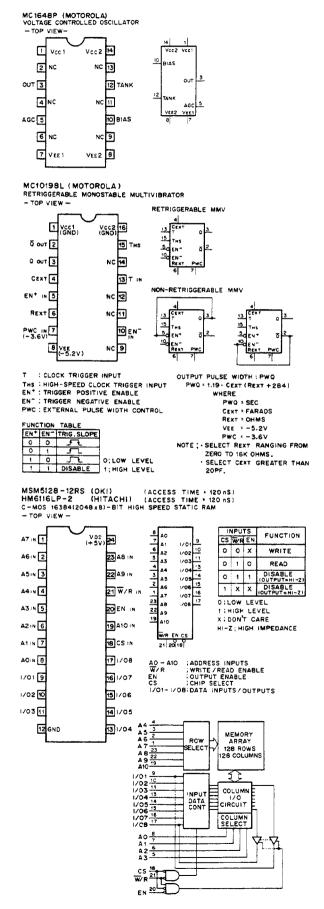


VCO (PULSE POSITION MODULATOR)

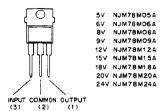








NJM78MDDA (JRC) VOLTAGE REGULATOR --FRONT VIEW --



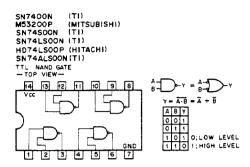


NJM4558D (JRC) RC4558 (RAYTHEON) JPC4558C (NEC) OPERATIONAL AMPLIFIER -TOP VIEW-

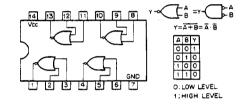


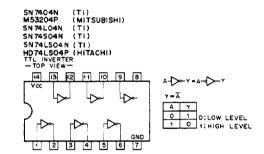
NJM4560D (JRC)
OPERATIONAL AMPLIFIER
- TOP VIEW-



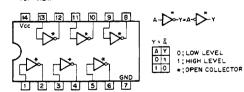


SN7402N (T1)
M53202P (MITSUBISHI)
SN74S02N (T1)
SN74LS02N (T1)
HD74LS02P (HITACHI)
TTL 2-INPUT POSITIVE -NOR GATE
—TOP VIEW —

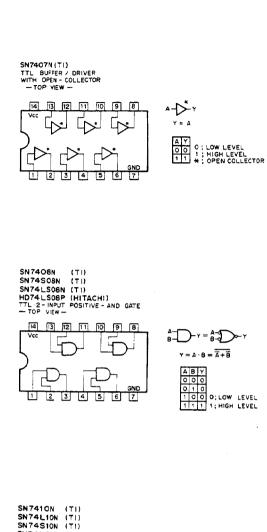


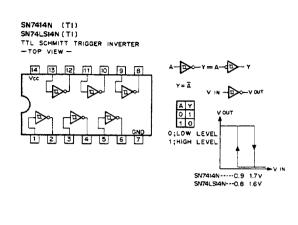


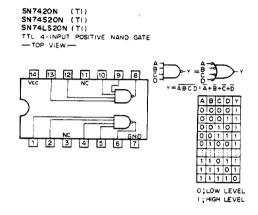
SN7406N (TI)
M53206P (MITSUBISHI)
TIL INVERTER BUFFER / DRIVER
WITH OPEN-COLLECTOR
—TOP VIEW—

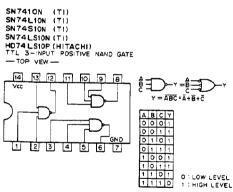


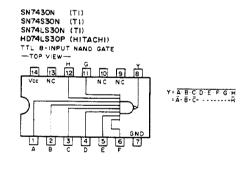
B-9

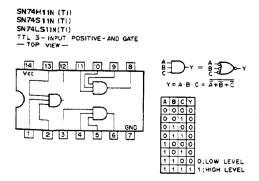


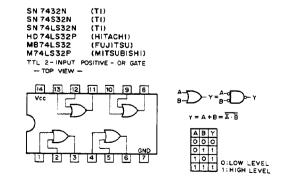






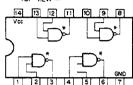


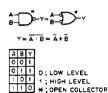




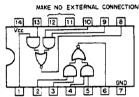
(TI) (TI)

SN7438N (TI) SN74S38N (TI) SN74LS38N (TI) TT. 2- IMPUT POSITIVE - NAND GATE BUFFER WITH OPEN-COLLECTOR TOP VIEW -



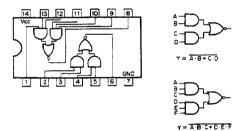


SN7451N (T|)
SN74H51N (T|)
SN744551N (T|)
SN744551N (T|)
T1L 2 - WIDE 2 - INPUT AND - OR - INVERT GATE
- TOP VIEW -



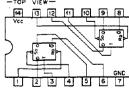


SN74LS5IN (TI)
SN74L5IN (TI)
TTL 2-WIDE 2-INPUT / 3-INPUT AND-OR-INVERT GATE

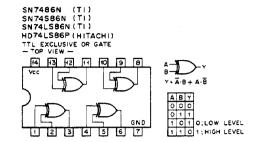


SN7474N M53274P SN74H74N SN74L74N SN74S74N MTS3274P (MTSUBISHI)
SN74H74N (TI)
SN74L74N (TI)
SN74L74N (TI)
SN74LS74N (TI)
SN74LS74N (TI)
HD74LS74P (HITACHI)

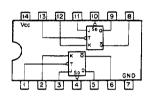
TTL D-TYPE FLIP FLOP WITH DIRECT SET/ RESET -TOP VIEW-



IN	Pυ	TS	_	OUTF	UTS
Sc	Ro	T	D	Qn+1	On+1
0	1	X	X	1	0
1	0	X	X	0	1
0	0	x	X	1*	1 *
1	1	Ĩ	1	1	0
1	1	5	0	0	1
7	1	0	х	Qп	Qn
0;	LO	w	LE	VEL	
1;	HIC	3H	u	EVEL	
x;	DO	N'	٠,	CARE	
*	NO	NS	ТΔ	BLE	

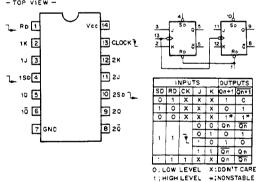


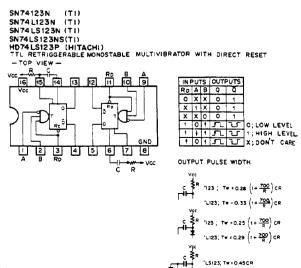
SN74S113N (TI) SN74LS113N (TI) SN74LS113AN (TI) TTL J-K FILP FLOP WITH DIRECT SET -TOP VIEW -



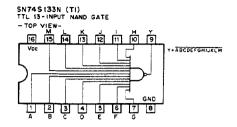
	MP	UTS		OUTPUTS		
S۵	T	J	K	Qn+1	On+1	
0	X	X	X	1.1	0	
1	J.	0	0	Qn	Qñ	
1	J	0	1	0	1	
1	ī	1	0	1	0	
1	Ŧ.	1	1	<u>o</u> n	Qn	
1	1	X	X	Qn	Ōπ	
	.ow	. EV	E	x - nc	N'T C	

SN74S114N (Ti)
SN74LS114AN (Ti)
SN74ALS114N (Ti)
SN74ALS114N (Ti)
TTL J-K FLIP -FLOP WITH DIRECT SET/RESET
- TOP VIEW -



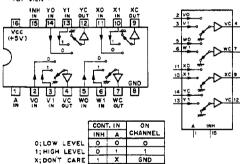






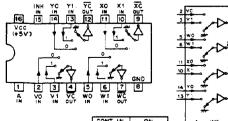
SN74151AN (TI) SN74S151N (TI) SN74LS151N (TI) TTL 8-LINE-TO---LINE DATA SELECTOR/MULTIPLEXER -- TOP' VIEW --\$3 IN 1 Vcc 16 3 51 \$2 IN 2 15 S4 IN 15 S4 14 S5 14 S5 IN SO IN 4 13 S6 IN SC OUT 5 12 S7 IN 11 A IN SC out 6 INH IN 7 10 B IN CONTROL INPUTS
INH C B A
O O O O BGND 9 C IN 0 1 0 1 O; LOW LEVEL 1; HIGH LEVEL X; DON'T CARE

SN74S157N (TI) TTL 2-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER — TOP VIEW —



SN74LS158N (TI)

SN74S158N (TI)
TTL 2-LINE-TO-1-LINE INVERTED DATA SELECTOR/MULTIPLEXER
— TOP VIEW —

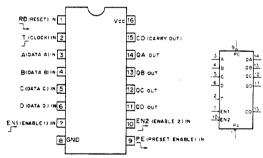


IN	IR	OUT	IN	!N	OUT	
			[CONT	. IN	ON
			- 1	INH	Α	CHANNEL
0:1	LOW	LEV	EL [0	0	0
		LEY		0	1	1
X;	DON'	T ÇA	RE	1	х	GND

SN741 SN741 HD741 TTL PF	.S16 .S16 .ESET	IAN IP Tabl	(TI) (HIT,	ACHI) NCHRONOUS 4-BI	T BINA	RY COUNT	ER			
RD (I	RÉSET) IN [T		Vec 16						
Ţ	CLOCX	: #N[2		15 cc	(CARRY	OUT1			I	
_	ATA A			140	OUT		3	1.	PE OA	14
8:0	ATA 8	IN 4		1308	OUT		3	8	Q.8	13 12
Cıb	ATA Ç	IN 5		72 00	12 OC OUT 6					11
D (D	ATA D	· M6		1100		2 T 7 EN1 CO 15				15
ENTIEM	-				10 EN2 (ENABLE 2) IN 10 ENZ					
		8	GND	<u> </u>	(PRESE	T ENABLE!	N		l	
	SEL	ECT I			_	COUNT SE	QUEN		PUTS	
RD		EN1		MODE	-	COUNT	90	QC	QB	QA
<u> </u>				RESET	┥		8	0	0	0
0	X	×	X	(ASYNCHRONOUS	s)	1	6	0	0	Ť
1	0	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	x	PRESET	7	2	ő	ŏ	1	0
Ľ		×	×	(SYNCHRONOUS)		3	0	0	1	1
1	1	0	×	NO COUNT		4	Ö	1	0	0
1	1	X	0	NO COUNT		5	0	1	0	1
1	1	1	. 1	COUNT		- 6	0	1	1	0
0;10	W LI	EVEL				7	٥	1	1	1
1; HI						. 8	-1-	0	0	٥
X:DC	N'T	CARE				9	1	0	0	1

SN74163N (TI)
SN74S163N (T!)
SN74LS163AN (T!)
HD74LS163P (HITACHI)
TTL PRESETTABLE SYNCHRONOUS 4-BIT BINARY COUNTER
- TOP VIEW -

CO IS HIGH WHEN EN2 INPUT IS HIGH AND COUNT IS "15".



		INP		MODE
Ro	PE	EN1	EN2	MODE
0	×	×	×	RESET (SYNCHRONOUS)
1	0	х	x	PRESET (SYNCHRONOUS
1	1	0	X	NO COUNT
1	1	_ X	0	NO COUNT
1	1.	1	1 1	COUNT
	W LE SH LI NT	EVEL		
,00				

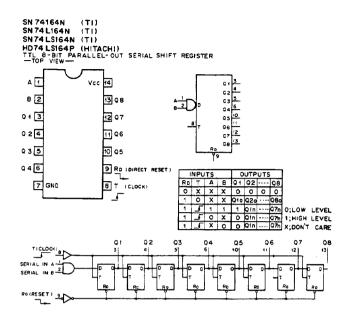
CO IS HIGH WHEN EN2 INPUT IS HIGH AND COUNT IS "15".

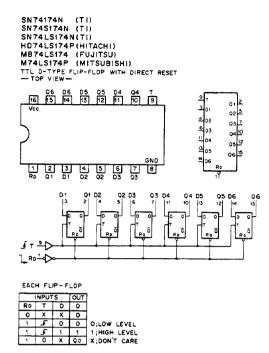
COUNT		OUT	UTS	
COUNT	Q D	QC	QB	QA
. 0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	o	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	_1_	0	0
13	1	1	0	1
14	1	t	1	0
15	1	1	1	- 1

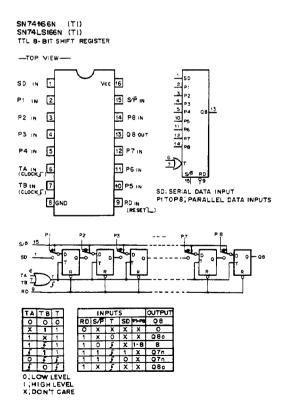
0	0	. 0	0	0	
1	0	. 0	0	1.	
2	0	0	1	0	
3	0	0	1	1	
4	olo	. 1	0	0	
5	0	1	0	1	
6	0	1	1	0	
7	0	1	1	_	
8	1	0	0	0	
9	1	0	0	1	
10	1	0.0	1	0	
11	1	0	1	1	
12	1	_1	0	0	
13	7	1	0	1	
14	1	t	1	0	
15	_1	1	1	1.	

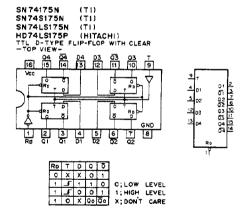
1 1 0 0

12



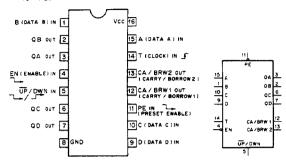




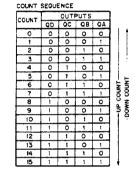








CON	TROL	INPUTS	MODE
PΕ	EN	UP/DWN	1 ****
0	x	×	PRESET LASYNCHRONOUS
1	1	×	NO COUNT
1	0	Ö	UP COUNT
1	0	1	DOWN COUNT



1; HIGH LEVEL X; DON'T CARE. CA / BRW OUTPUTS

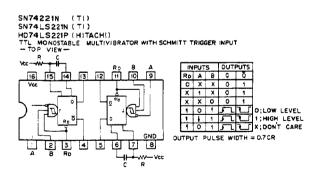
EN

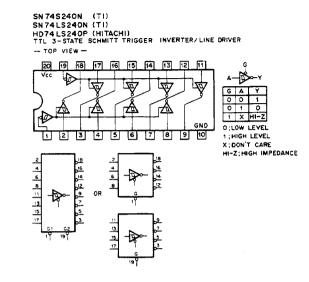
CA/BRW 1 OUTPUT IS HIGH WHEN COUNT IS "15" AT UP-COUNT OR WHEN COUNT IS "0" AT DOWN COUNT.

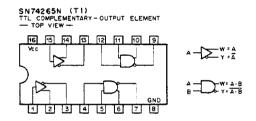
CA / BRW 2

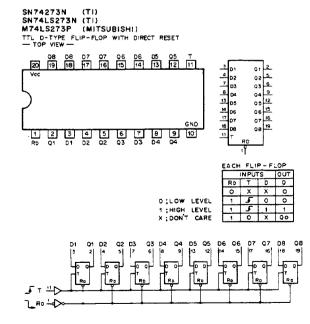
CA/BRW

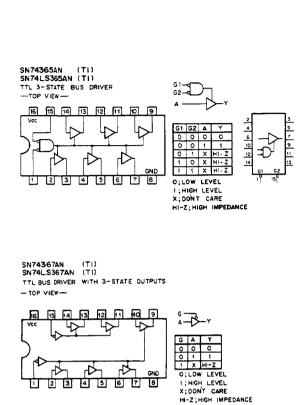
CA/BRW2 OUTPUT IS LOW WHEN BOTH THE CLOCK AND EN INPUTS ARE LOW AND CA/BRW1 OUTPUT IS HIGH.

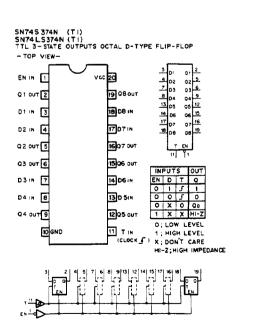


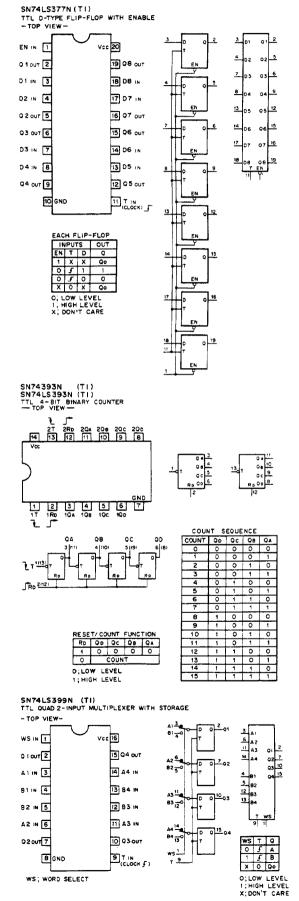




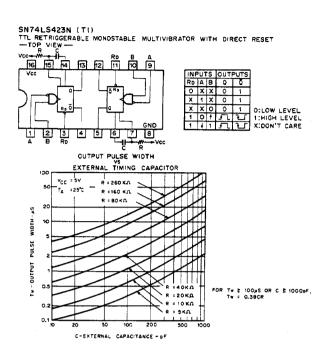


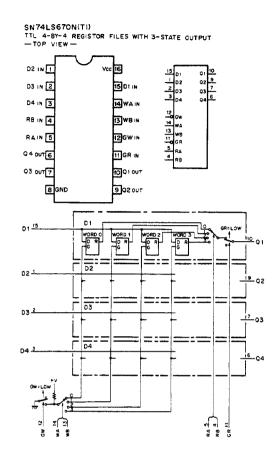


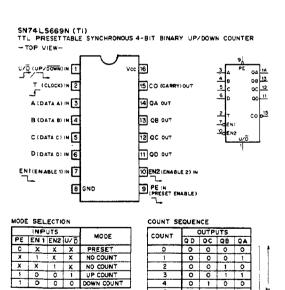




OR





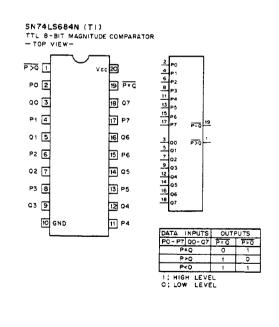


O; LOW LEVEL 1; HIGH LEVEL X; DON'T CARE

CARRY OUTPUTS "CO" AT U/0=1

> EN2-AT U/0=0

98 90 90



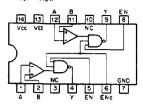
COUNT COUNT 0 ₽

1 0 1

1 0 1

1 1 0 0 1 1 0 1 1 1 1 0

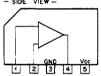
SN75207BN (TI)
BIPOLAR LINE RECEIVER (TTL COMPATIBLE)
-- TOP VIEW --

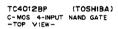


INPUTS	5		OUT
8 - A	EN	ENc	Y
	X	0 X 1 0 X 1 X X X X X X X X X X X X X X	1
B - A ≧ 10m V	0	X	-
	1	1	0
	X	0	1.
B-A <10mV	0	X	1
	1	1	?
B - A ≦ -10m V	×	X	1
	1 ; HI		EVEL

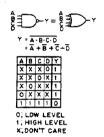
TA7060AP (TOSHIBA)

LINEAR AMP

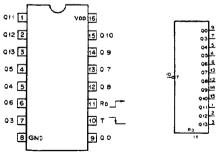


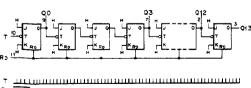


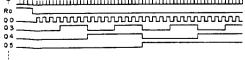
13 12 11 10 9 8 NC GND



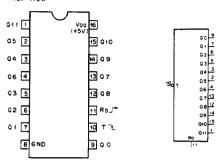
TC4020BP (TOSHIBA)
C-MOS 14-STAGE RIPPLE-CARRY BINARY COUNTER/DRIVER
- TOP VIEW —

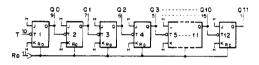






TC4040BP (TOSHIBA)
C-MOS 12-STAGE RIPPLE CARRY BINARY COUNTER/DRIVER
- TOP VIEW --





COUNT	Q11	QIO	09	QB	07	96	05	Q4	Q3	02	01	00	RD	Q11Q0
0	C	0	0	0	0	0	0	0	0	0	O	0	1	ALL LOW
1	0	0	0	0	0	0	0	0	0	0	0	1	0	COUNT
2	0	0	0	0	0	0	0	0	0	0	1	0		
3	0	0	0	0	0	0	0	0	0	0	1	\Box		
		1			- ;	1			1	1	- I			
	1	1				1	1.	1		1	:		0;1	OW LEVE
4095	1	1	1	1	1	1	1	1	1	1	1	П	1 : 1	IIGH LEVEI

TLO82CP (TI)

µPC4082C (NEC)

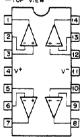
OPERATIONAL AMPLIFIER

(JFET-INPUT)

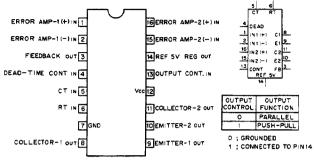
- TOP VIEW -

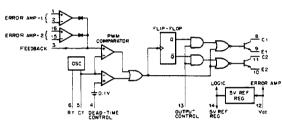


TLO84CN (TI)
OPERATIONAL AMPLIFIER
(JFET-INPUT)
—TOP V.EW—



TL494CN (TI) PWM POWER CONTROL -- TOP VIEW-



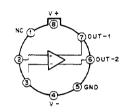


TL710CP (T1) VOLTAGE COMPARATOR

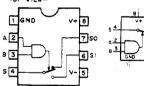




µA760HC(FSC) HIGH SPEED VOLTAGE COMPARATOR -TOP VIEW-

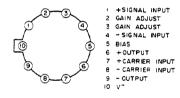


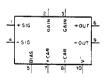
TL601CP (T1) P-MOS ANALOG SWITCH -TOP VIEW-

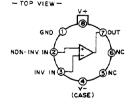


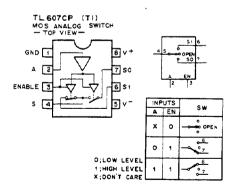
81	CONT	- IN	ON
V+ 01 6 st	A	B	CHANNEL
5 4 7 50	0	0	so
42 - 30	0	1	\$0
.3	1	0	so
GND V-	_ 1	1	St
1 5	0; L0		
	1; HD	GH L	EVEL

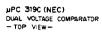
MC1496G (MOTOROLA)
µA796 HC (FSC)
DOUBLE-BALANCED MOD/DEMOD.
- BOTTOM VIEW-

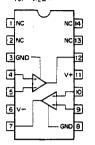


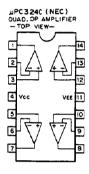








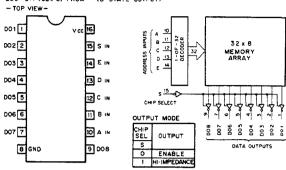




PC4557C (NEC)
OPERATIONAL AMPLIFIER
(WIDE BAND, LOW NOISE)
-TOP VIEW-



M87051 (FUJITSU) 256-BIT (32x 8) PROM (3-STATE OUTPUT) -TOP VIEW-



WORD / ADDRESS TARLE

WOKD /	ORD / ADDRESS TABLE						
WORD		ODRI	ESS	INP	UTS		
WORD	ш	D	Ç	В	A		
0	0	0	0	0	0		
1	0	٥	0	o	1		
2	0	0	0	1.	0		
	:	:	1		:		
i.	L :			-	:		
29	1	1	1	0	1		
30	-	_	1	1	0		
31	1	1	1	1	1		

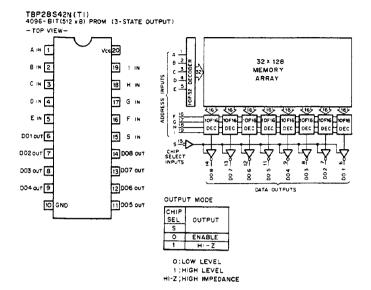
Д	IA	COD	Ŀ/	AC	IUA	L DA	TA
	DA	TA	Г			A	CTL

2010		E / AC	TUAL						
	ATA			A	TUAL	DAT	A		
CC	DÉ	800	007	006	D05	DO4	D03	D02	D01
0	00	0	0	0	0	0	0	0	C
_ 1	01	0	C	0	0	0	0	0	_ 1
2	02	0	0	0	0	0	0	1	С
- :				- ;				:	
8	08	٥	0	0	0	1	0	0	0
9	09	0	0	0	0	1	0	0	1
10	OA	٥	0	0	0	1	0	1	0
- 11	OB	0	0	0	0	1	0	1	1
12	0.0	0	0	0	0	1	1	Ö	0
13	00	0	0	0	٥	1	-	0	1
14	0 E	0	٥	0	0	1	1		o
15	0 F	0	0	0	0	1	1	_	1
16	10	0	0	0	1	0	0	0	0
17	11	0	0	0	1	0	0	0	1
								-	
238	EΕ	1	1 (1	0	1	1	. 1	0
239	EF	1	1	1	0	1	1	1	1
240	FO	_	1	Ŧ	1	0	0	0	0
241	F1	1	1	1	1	0	0	0	_1
242	F 2	1	1	1	-1	0	0	1	0
	-:-		- 3 - 1		:				: -
248	F 8	_	1	1	i	1	0	0	0
249	F9	1	1	_1	1	1	0	0	_1
250	FA	1	1	1	1	1	0	- 1	0
251	FB	1	1	1	1	1	0	1	1
252	F C	1	1	1	1	1	1	0	0
253	FD	1	1	1		1	1	0	_1
254	FE	-	1	1	1	1	1	1	0
255	FF	1	1	_1	1	1	1	1	_1
,	•	IN HEX	ADEC	MAL					
V-11	N DEC	MAL							

M87051-YCDL

PROGRAMMED DATA								
WORD (ADDRESS)	DATA OUTPUTS (IN HEXADECIMAL)							
	35. 35. 35. D2. 57. 94. 73. B0. 9E. 9E. 9E. 9E. 9E. 9E. 9E. 9E. EA. EA. EA. 4B. AC. 0D. 98. 29. 9E. 9E. 9E. 9E. 9E. 9E. 9E. 9E. 9E. 9							





TBF	28\$42N	I-CADR
000	CRAMM	ED DAT

WORD (ADDRESS)	DATA OUTPUTS (IN HEXADECIMAL)
0 - 15 16 - 31 32 - 47 48 - 63 48 - 63 64 - 79 80 - 95 96 - 111 112 - 127 128 - 143 144 - 159 150 - 175 176 - 191 192 - 207 208 - 223 224 - 239 240 - 256 256 - 271 272 - 282 288 - 303 336 - 351 332 - 355	00.01.02.03.04.05.06.07.08.09.0A.0B.0C.0D.0E.0F.10.11.12.13.14.15.16.17.18.19.1A.1B.1C.1D.1E.1F.21.22.23.24.25.26.27.28.29.2A.2B.2C.2D.2E.2F.30.30.31.32.33.34.35.36.37.38.39.3A.3B.3C.3D.3E.3F.20.20.21.22.23.34.35.36.37.38.39.3A.3B.3C.3D.3E.3F.20.20.21.22.23.34.25.26.27.28.29.2A.2B.2C.2D.2E.2F.30.30.31.32.33.34.35.36.37.38.39.3A.3B.3C.3D.3E.3F.20.20.21.22.23.24.25.26.27.28.29.2A.2B.2C.2D.2E.2F.30.31.32.33.34.35.36.37.38.39.3A.3B.3C.3D.3B.3F.3F.20.20.20.20.20.20.20.20.20.20.20.20.20.
368 - 383 384 - 399 400 - 415 416 - 431 432 - 447 448 - 463 464 - 479 490 - 495	21, 22, 23, 24, 25, 26, 27, 28, 29, 2A, 2B, 2C, 2D, 2E, 2F, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 3A, 3B, 3C, 3D, 3E, 3F, 20, 0C, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B, 0C, 0D, 0E, 0F, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 1A, 1B, 1C, 1D, 1E, 1F, 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B, 0C, 0D, 0E, 0F, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 1A, 1B, 1C, 1D, 1E, 1F, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 2A, 2B, 2C, 2D, 2E, 2F, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 3A, 3B, 3C, 3D, 3E, 3F, 2C, 2D, 2E, 2F, 3D, 3E, 3F, 3B, 3B, 3C, 3D, 3C, 3F, 3F, 3B, 3B, 3C, 3D, 3C, 3C, 3C, 3C, 3C, 3C, 3C, 3C, 3C, 3C

WORD/ADDRESS TABLE

WORD	ADDRESS INPUT								
WORD	Ξ	H	G	F	Ε	D	С	В	Α
٥	0	0	0	0	0	0	0	0	Q
1	0	0	0	0	0	0	0	0	1
2	0	С	0	0	0	0	0	1	0
									-
509	-	1	1	1	1	1	1	0	1
510	1	1	1	1	1	1	1	1	0
511	1	1	1	1	1	1	1	1	1

0; LOW LEVEL 1; HIGH LEVEL

DA						. DAT			
			007			_	003	002	001
_ 0;		0	0	0	0	0	0_		0
1.1		0	٥	0	٥	0	0	0	<u> </u>
2	02	0	0	0	0	0	0	1	0
-									-
8		0		0	0	1	_ <u>~</u> _	0	0
9	09	0	٥	0	0	1	0	0	1
10	OA	0		0	0	1	0	1	0
	OB	0		0	0	1	0	1	1
	o c	0	0	0	0	_	1	0	
13	00	0		0	0	1	1	0	1
14	0 E	0		0	0	1	1	1	0
15	0 F	0	0	0	O	-	- 1	- 1	1
16	10	0	0	0	1	0	0	0	0
17	11	0	0	0	1	0	0	0	1
		-:-		:					
238	ΕE	1	1	1	0	1	1	1	0
239	EF	1	1	- 1	0	. 1	1	1	1
240	F.O.	1	1	_ 1	. 1	0	0	0	0
241	F 1	1	1	1	1	0	0	0	1
242	F2	1	1	1	1	0	0	1	0
24B	F8	1	1	1	1	1	0	0	O
249	F9	_1_	1	1	. 1	1	0	0	1
250	FA	1	1	1	1	1	0	1	0
251	FB	1	1	1	1	1	0	:	1
252	FC	1	1	1	1	1	1	0	0
253	FD		1	1	1	1	1	0	1
254	FE	1	1	1	1	1	1		0
255	FF	1		1	1	1	1	- :	
1	$\overline{}$		- ADE C						

TBP28S42N-YADR

WORD (ADDRESS)	DATA OUTPUTS (IN HEXADECIMAL)
0 - 15	1D. 1E. IF. CO. 01. 02. 03. 04. 05. 06. 07. 08. 09. 0A. 0B. 0C.
16 - 31	OD. 0E. 0F. 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 1A, 1B, (C.)
32 - 47	1D. IE. IF. CO. O1, O2, O3, O4, O5, O6, O7, O8, O9, OA, OB, OC,
48 - 63	OD. OE. OF. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 1A. 1B. 1C.
64 - 79	1D. 1E. 1F. 00. 01. 02. 03. 04. 05. 06. 07. 08. 09. 0A. 0B. 0C.
80 - 95	OD, OE, OF, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 1A, 1B, 1C,
96 - 111	1D. 1E. 1F. 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B, 0C,
112 - 127	OD. OE. OF. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 1A. 1B. 1C.
128 - 143	1D. 1E. 1F. 00. 01. 02. 03. 04. 05. 06. 07. 08, 09. 0A. 0B. 0C.
144 – 159	OD. 0E. 0F. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 1A. 1B. IC.
160 - 175	1D. 1E. 1F. 00. 01. 02. 03. 04. 05. 06. 07. 08. 09. 0A. 0B. 0C.
176 ~ 191	OD. OE. OF. 10. 11. 12. 13, 14, 15, 16, 17, 18, 19, 1A, 1B, 1C.
192 - 207	1D. 1E. 1F. 00. 01. 02. 03. 04. 05. 06. 07. 08. 09. 0A. 0B. 0C.
208 ~ 223	OD. OE. OF. 10. II, 12, 13, 14, 15, 16, 17, 18, 19, 1A, 1B, IC.
224 - 239	1D. 1E. 1F. 00. 01. 02. 03. 04. 05. 06. 07. 08. 09. 0A. 0B. 0C.
240 - 255	OD. OE. OF. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 1A. 1B. 1C.
256 ~ 271	00.01.02.03.04.05.06.07.08.09.0A.0B.0C.0D.0E.0F.
272 - 287	10. 11. 12. 13. 14. 15. 16, 17, 18, 19, 1A, 1B, 1C, 1D, 1E, 1F,
288 - 303	00.01.02.03.04.05.06.07.08.09.0A.0B.0C.CD.0E.0F.
304 - 319	10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 1A, 1B, 1C, 1D, 1E, 1F,
320 - 335	00.61.02.03.04.05.06.07.08.09.0A.0B.0C.0D.0E.0F.
336 - 351	10.11.12.13.14.15.16,17,18,19,1A,1B,1C,1D,1E,1F,
352 ~ 367	21. 22. 23. 24. 25. 26. 27. 28. 29. 2A. 2B. 2C. 2D. 2E. 2F. 30.
368 - 383	31. 32. 33. 34 35. 36. 37. 38. 39. 3A. 3B. 3C. 3D. 3E. 3F. 20.
384 - 399	00.01.02.03.04.05.06.07.08.09.0A.0B.0C.0D.0E.0F.
400 - 415	10.11.12.13.14.15.16,17.18.19.1A.1B.1C.1D.1E.1F.
416 - 431	00.01.02.03.04.05.06.07.08.09.0A.0B.0C.0D.0E.0F.
432 447	10. 11. 12. 13. 14. 15, 16, 17, 18, 19, 1A, 1B, 1C, 1D, 1E, 1F,
448 - 463	00.01.02.03.04.05.06.07.08.09.0A.0B.GC.0D.0E.0F.
464 - 479	10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 1A, 1B, 1C, 1D, 1E, 1F,
480 ~ 495	00.01.02.03.04.05.06.07.08.09.0A.0B.0C.0D.0E.0F.
496 - 511	10.11.12.13.14.15.16.17.18.19.1A.1B.1C.1D.1E.1F.

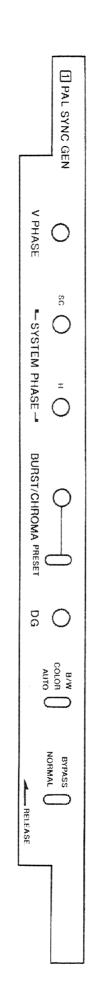
B-20 BVT-800PS

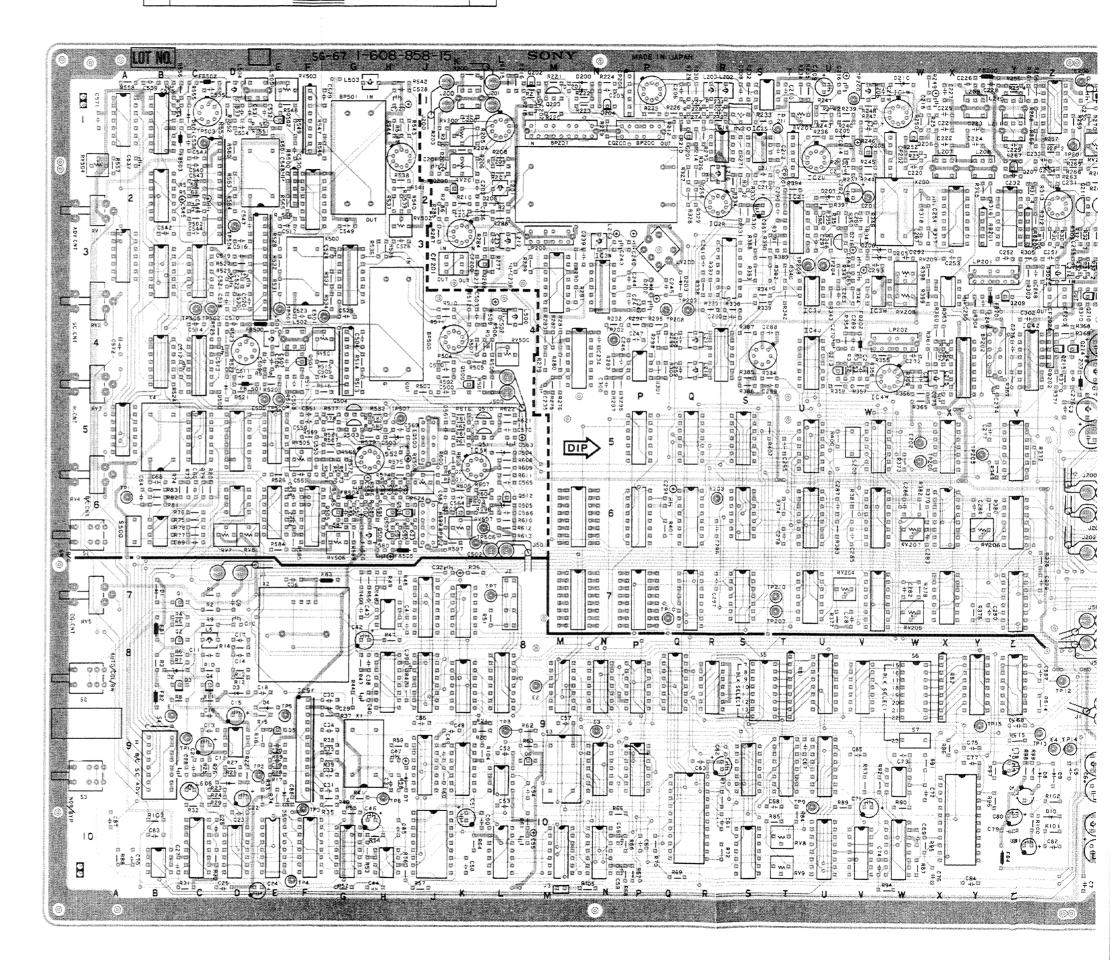


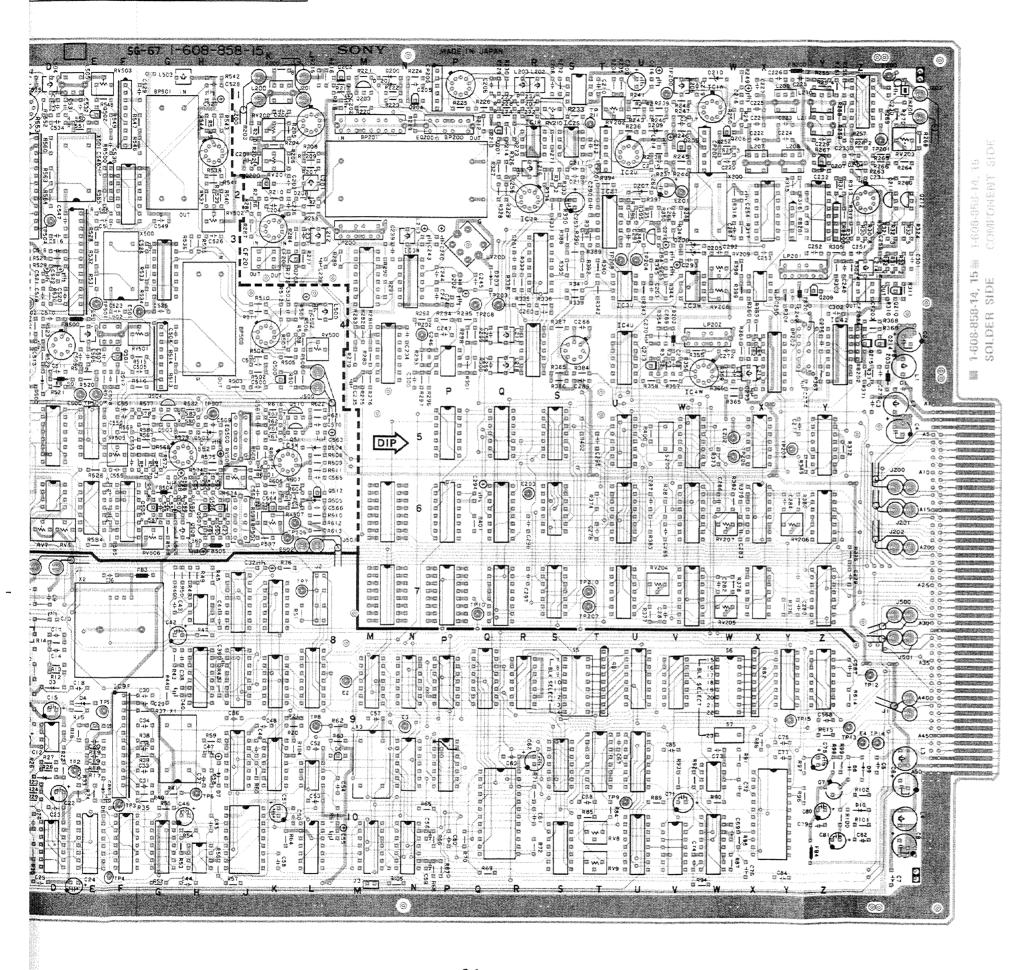
SECTION C SCHEMATIC DIAGRAM & BOARD LAYOUT



1 SG-67 BOARD (1-608-858-14, 15) Component Side



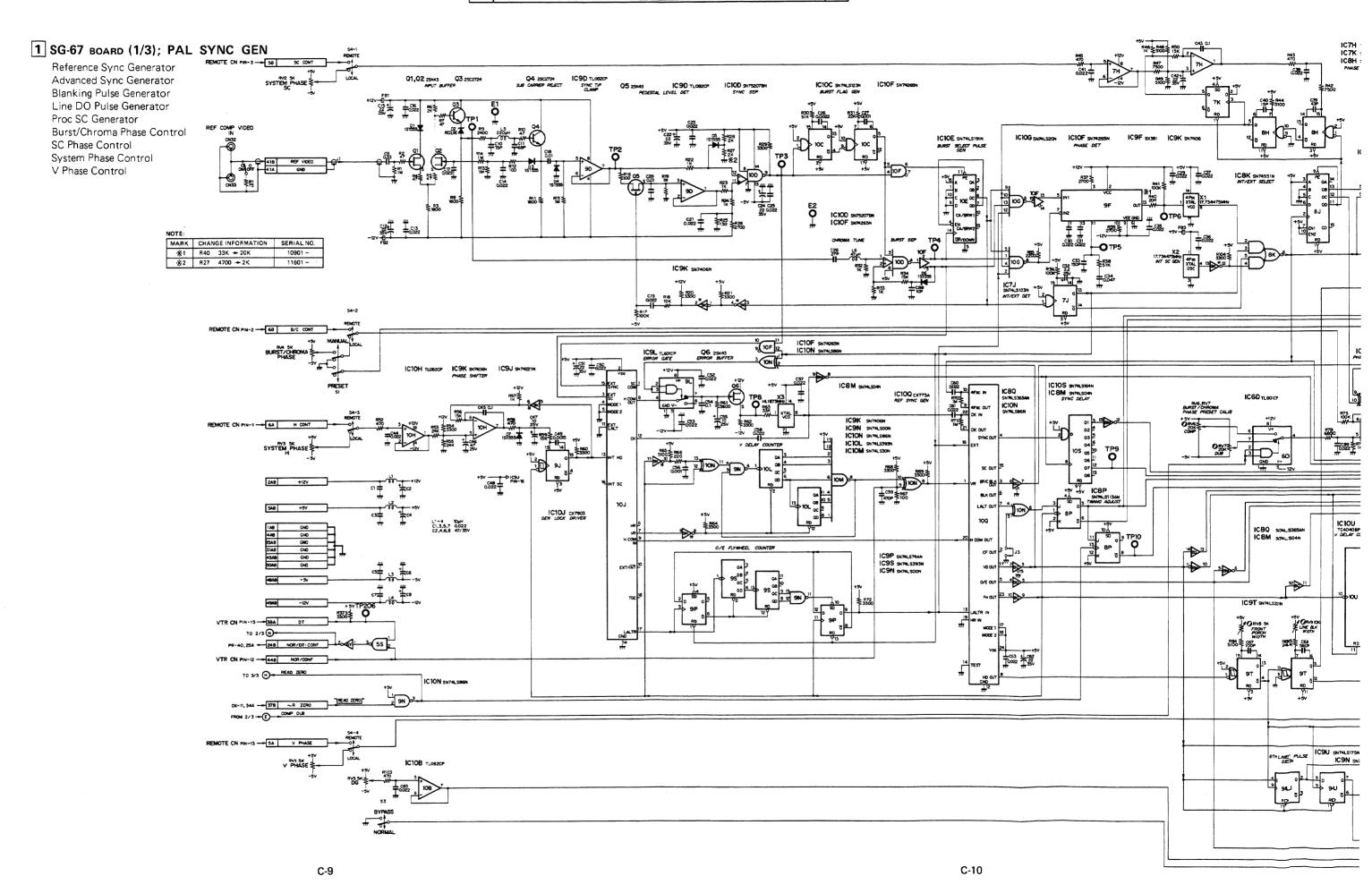


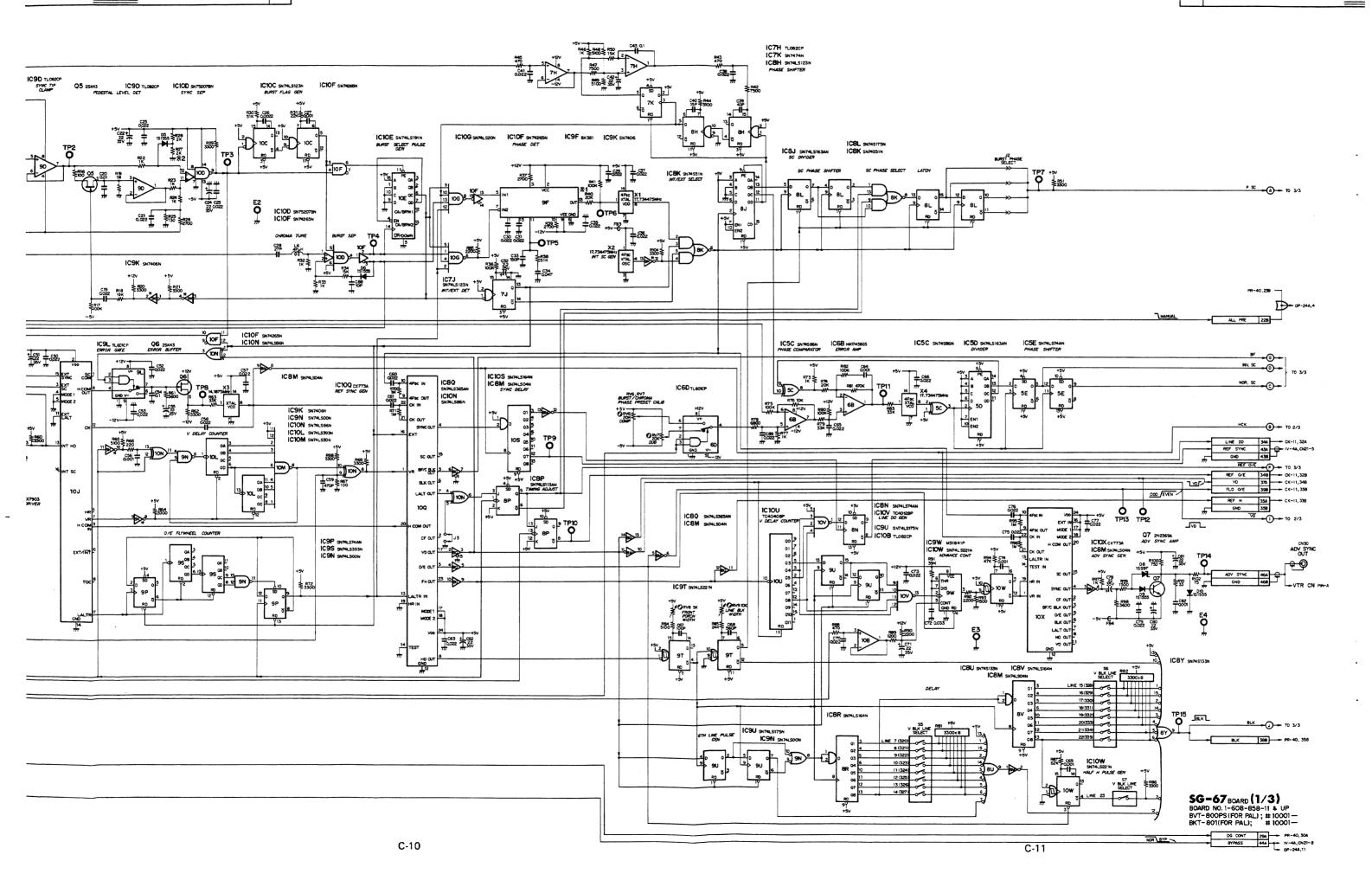


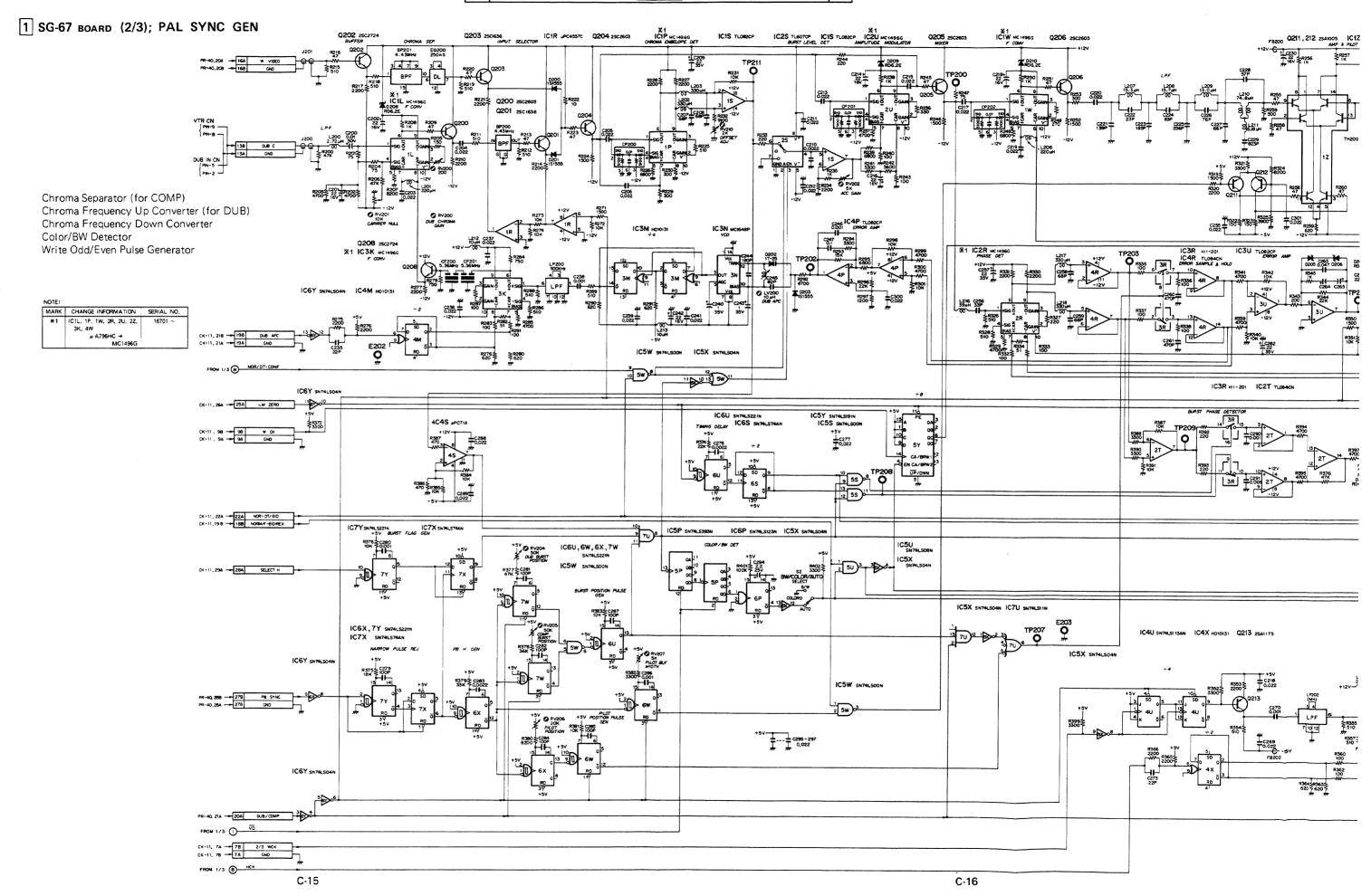
SG-67 (1-608-858-13, 14, 15) | ICSK | ICSP | ICSS | Q502 Q503 Q504 Q505 Q506 Q507 Q508 Q509 Q510 Q511 Q512 R81 87 R82 8X R8200 2Z R8201 2Y R8202 4Z R8500 2E RV1 2A RV2 3A RV3 4A RV4 5A RV5 7A RV6 6D RV7 6D RV8 10T RV200 1K RV201 1Z RV202 1T RV203 1Z RV204 7V RV205 7W RV205 7W RV206 6Y RV207 6W RV208 3W RV209 3W RV209 3W RV209 3W RV210 1S RV500 4L RV500 4L RV500 6G RV500 6G RV500 6G RV500 6G E1 E2 E3 E4 E200 E201 E202 E203 E500 E501 E502 EQ200 1P EQ500 5J \$1 \$2 \$3 \$4 \$5 \$6 \$7 \$200 \$500 6A 8A 9B 8S 8W 9W 5V 6A TH200 1Z TP1 9C
IP2 9E
IP3 10F
IP3 10F
IP4 10E
IP5 8E
IP6 9H
IP7 7K
IP8 9U
IP10 7Q
IP11 6A
IP12 8Z
IP14 9Z
IP14 9Z
IP16 8Z
IP16 8Z
IP16 SZ
IP17 LV200 3P 01 02 03 04 05 06 07 0200 0201 0202 0203 0204 0205 0206 0207 0208 0210 0211 0212 0213 0214 0215 0215 0216 0207 X1 X2 X3 X4 X200 X500 X501 9G 7E 9M 58 2W 3F 2E

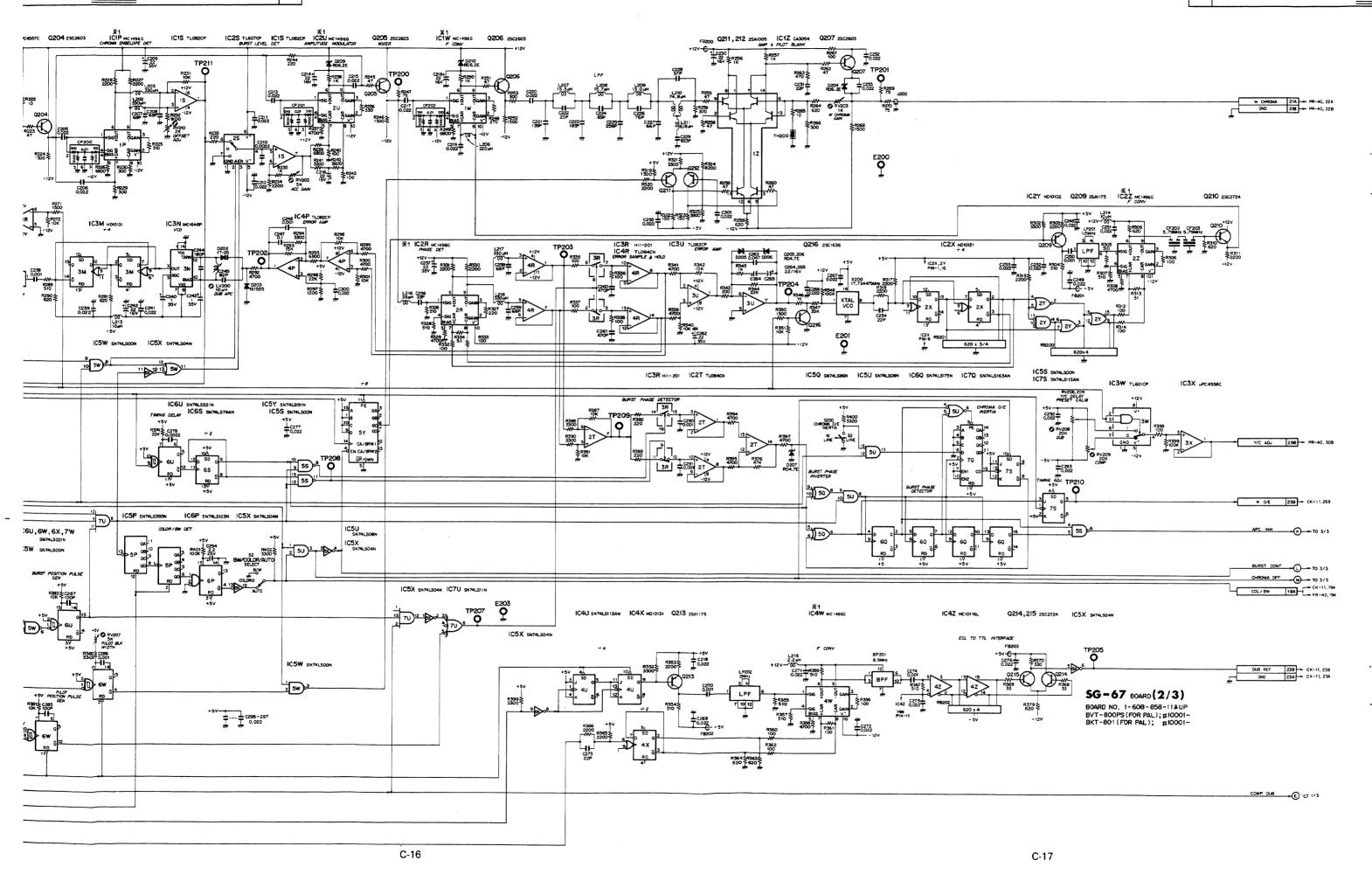
CP200, 201, 202 RB1, 2

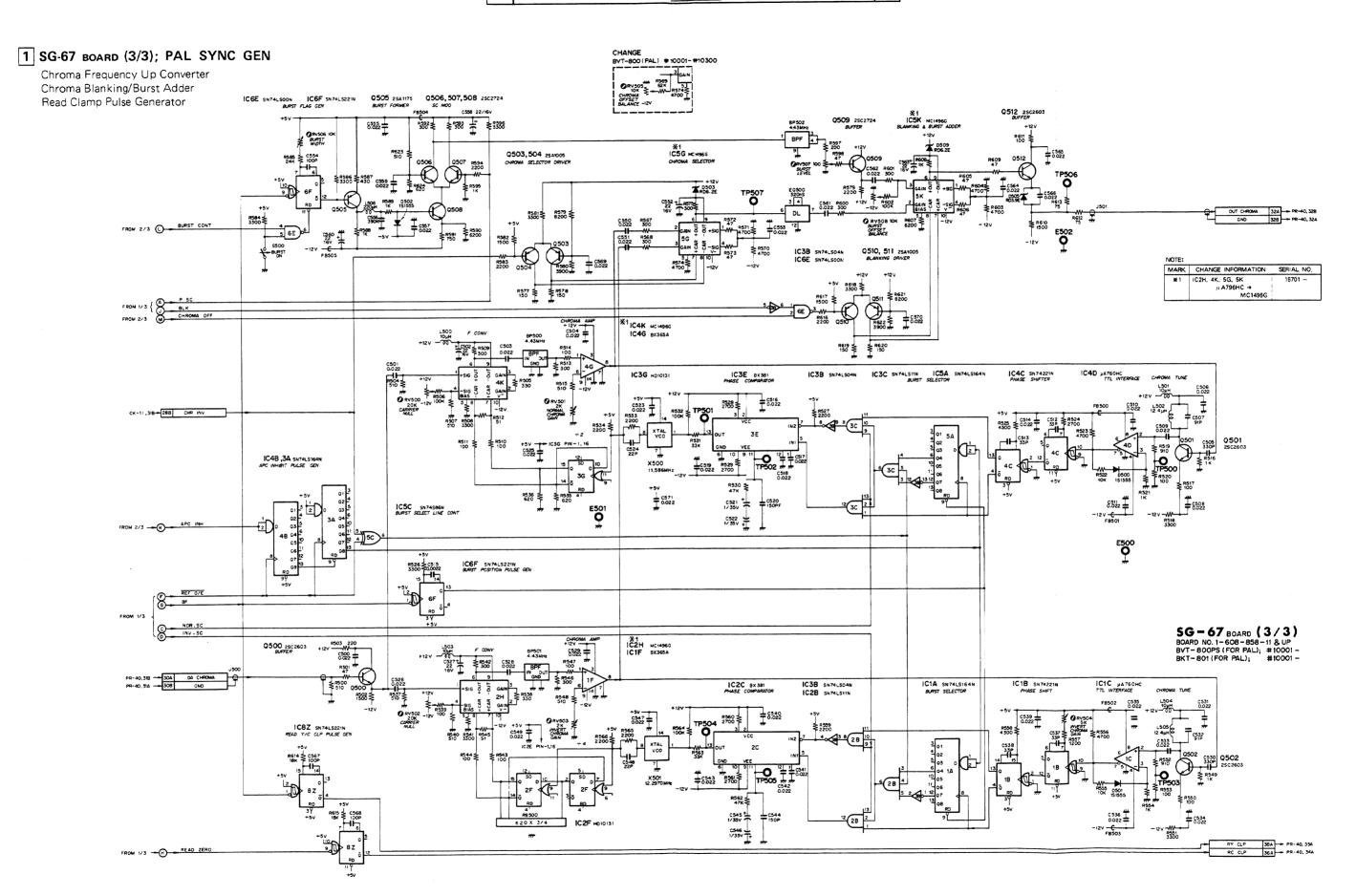
R8200, 201, 202, 500



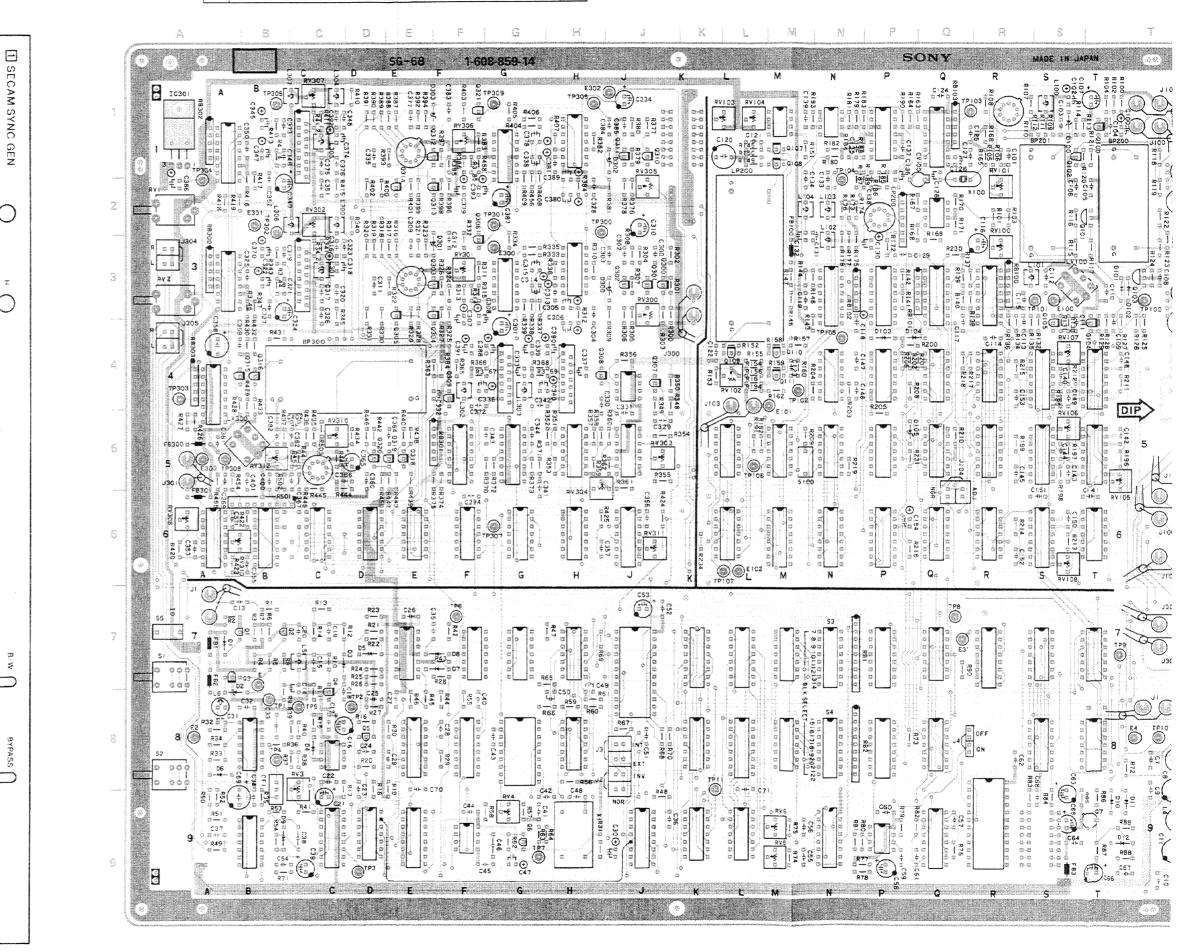








1 SG-68 BOARD (1-608-859-12 to 14) Component Side



C-25 (BVT-800PS) C-3 (BKT-802)

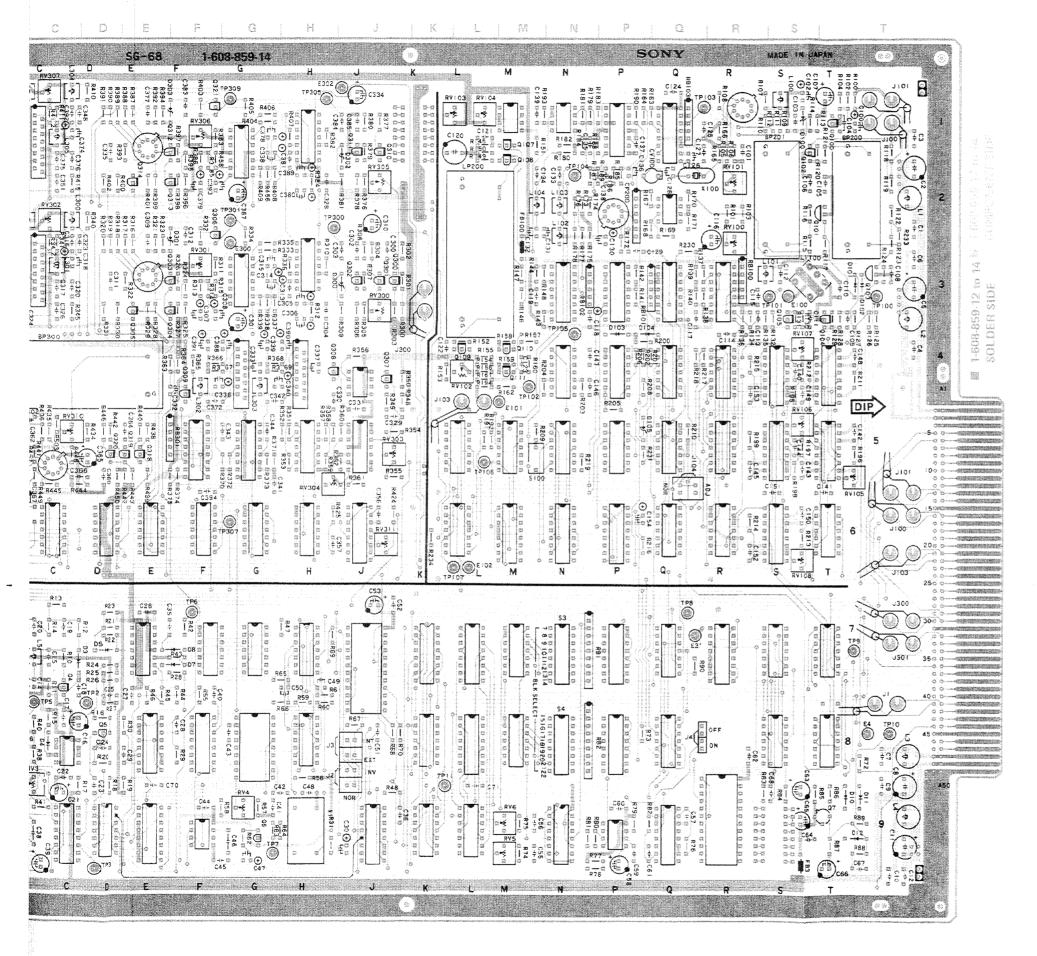
B/W

BYPASS

V PHASE 0

SYSTEM PHASE 0

> C-26 (BVT-800PS) C-4 (BKT-802)



RB1 7N RB2 8N RB100 3R RB101 3Q RB103 1Q RB300 3A RB301 5F RB302 1A RB303 4A D1 D2 D3 D4 D5 D6 D7 D8 D9 D10 D11 D102 D103 D104 D105 D300 D301 D301 D301 D303 RV1 2A RV2 3A RV3 9G RV5 9M RV6 9M RV100 1R RV1001 1R RV1002 1L RV104 15 RV106 5S RV107 4S RV106 6S RV107 4S RV108 6S RV108 6S RV3001 3F RV3001 3F RV3002 2C RV3004 5H RV3005 1J RV3006 1F RV3006 1F RV3006 1F RV3006 1F RV307 1G RV301 6J E1 E2 E3 E4 E100 E101 E102 E300 E301 E302 E303 \$1 \$2 \$3 \$4 \$5 \$100 TP1 8B
TP2 8D
TP4 8B
TP5 9C
TP6 7F
TP7 9G
TP8 7Q
TP9 7T
TP10 8T
TP101 3S
TP102 4M
TP103 1E
TP104 1N
TP105 4N
TP106 5L
TP307 6L
TP307 5G
TP307 5G
TP307 5G
TP307 5G
TP307 5G J2 J3 J4 J104 J304 J305 LV100 3S LV300 5B 7A 7B A 7C D G 9 T T T T S T M M 4 M M 3 3 J F F E F A 4 H F 1 J F F E E B B E E D A 4 H F J J F F E E B B E E E D

SG-68 (1-608-859-11 to 14)

CP200 RB1, 2 * * * * * • 111111

C-5 (BKT-802)

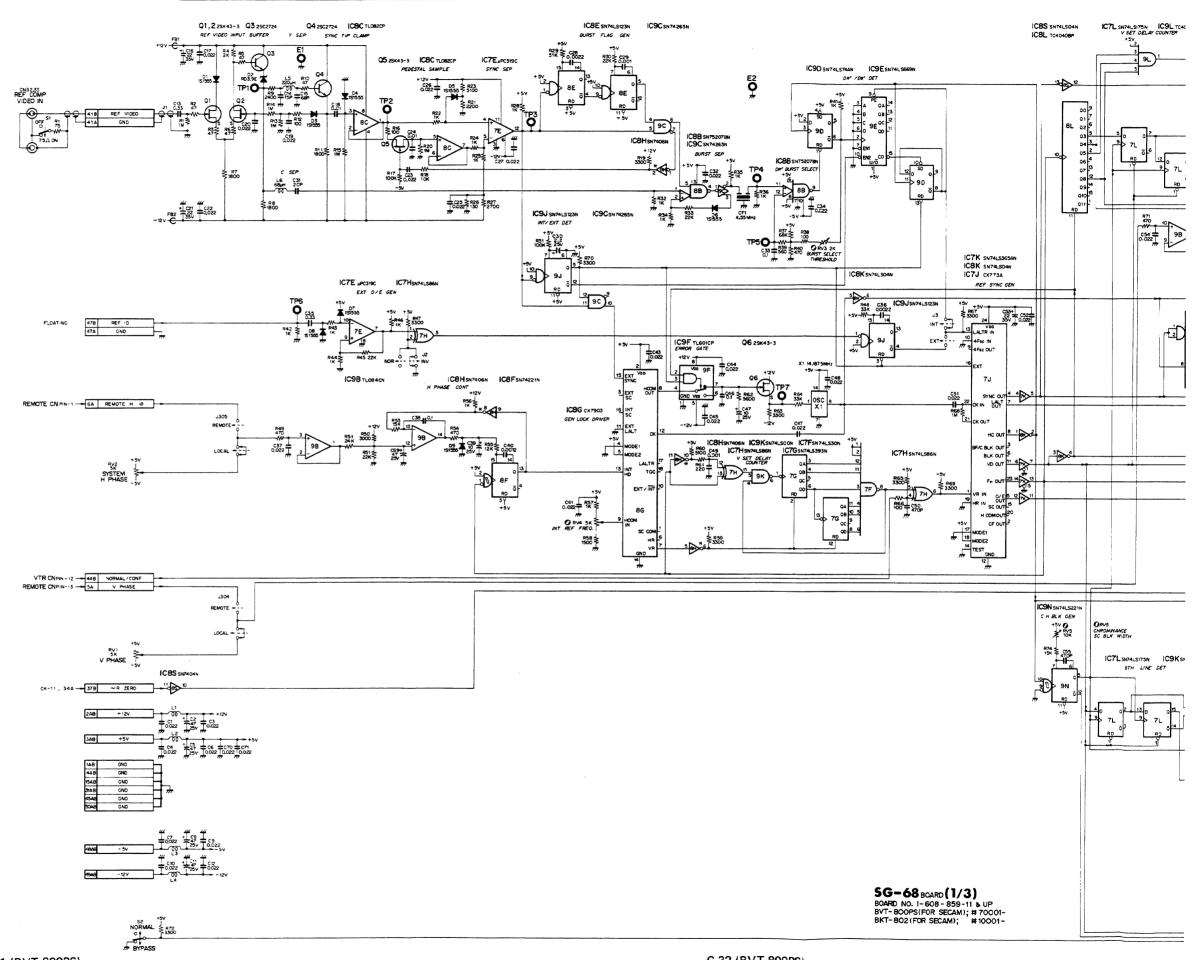
C-27 (BVT-800PS)

RB100, 101, 102, 103, 300, 301, 302, 303

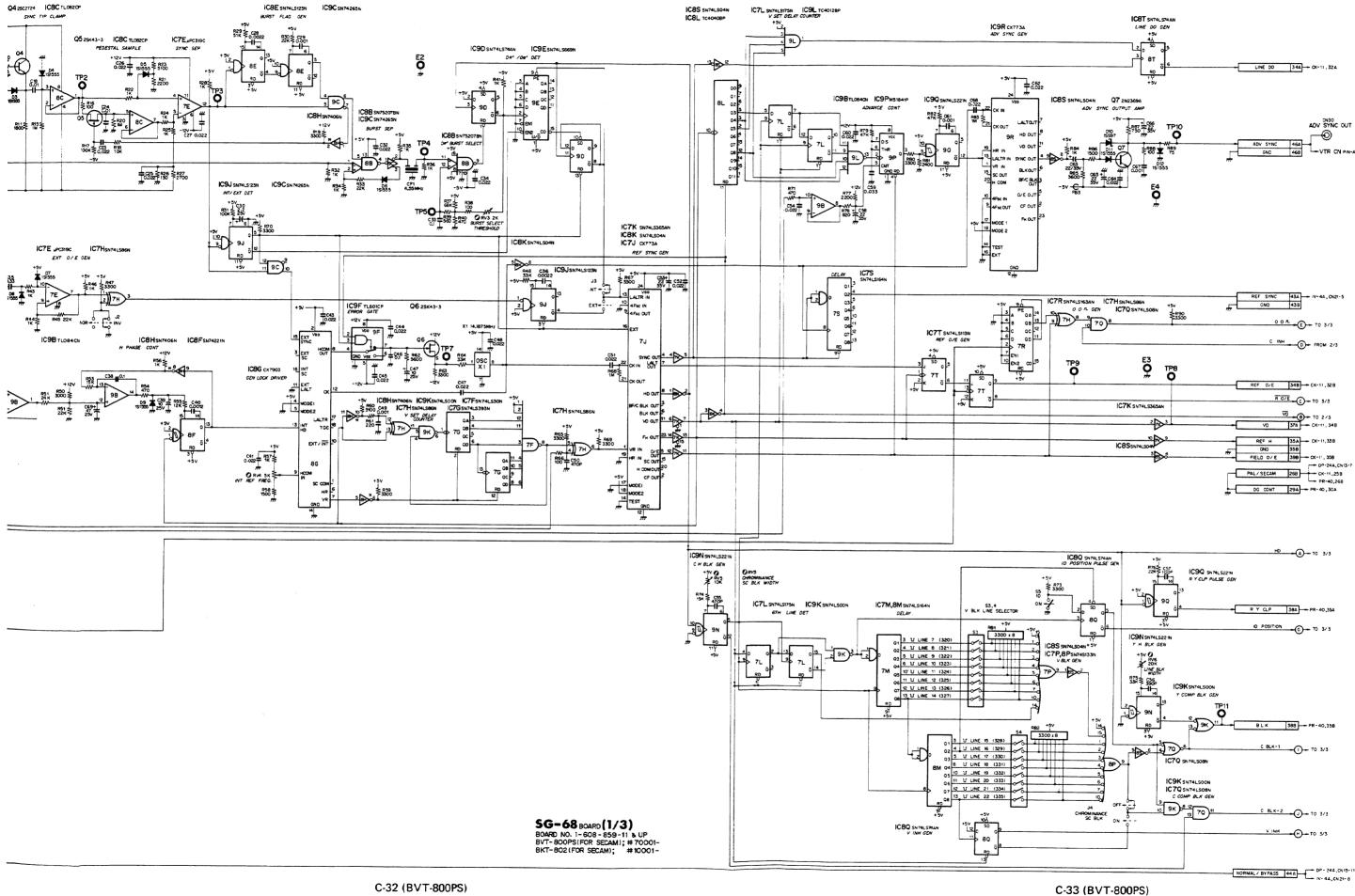
C-26 (BVT-800PS) C-4 (BKT-802)

1 SG-68 BOARD (1/3); SECAM SYNC GEN

Reference Sync Generator
Advanced Sync Generator
Blanking Pulse Generator
Line DO Pulse Generator
Read Y Clamp Pulse Generator
System Phase Control
V Phase Control



C-31 (BVT-800PS) C-9 (BKT-802) C-32 (BVT-800PS) C-10 (BKT-802)

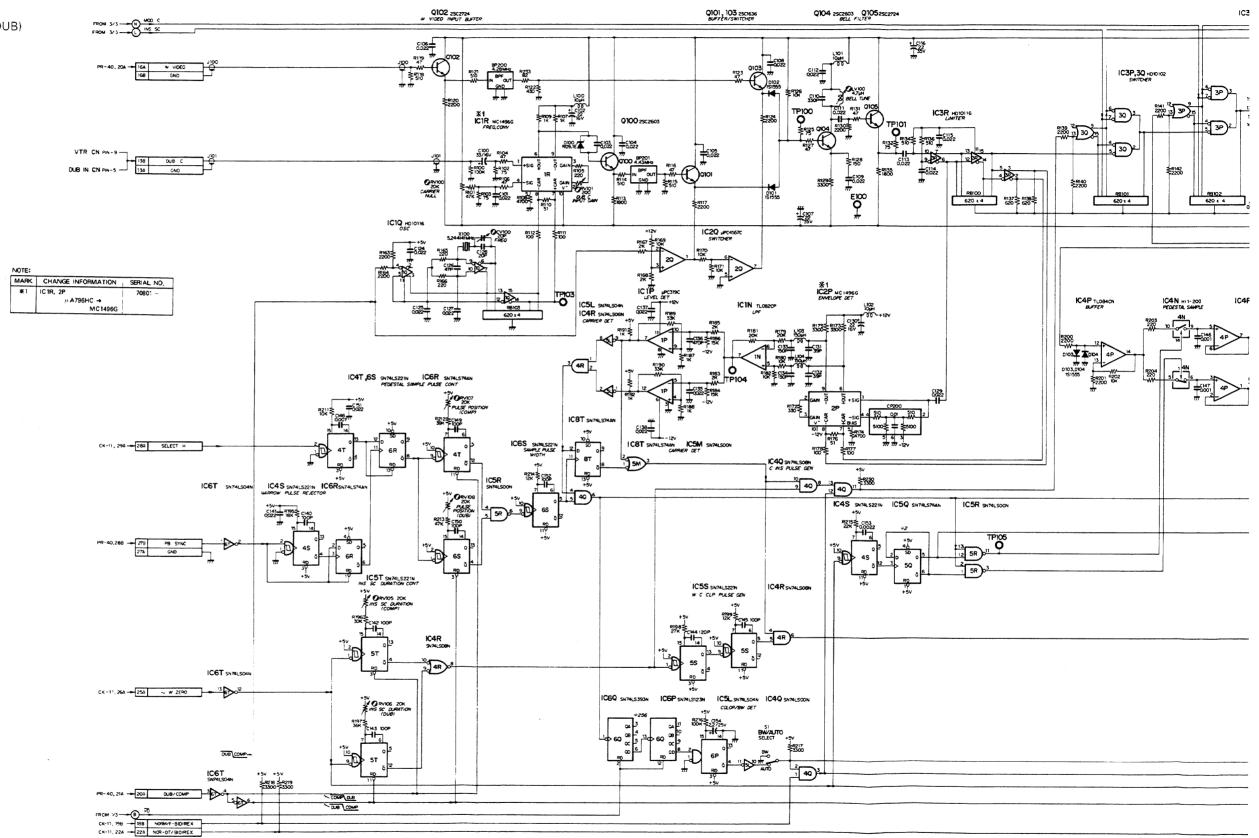


C-10 (BKT-802)

C-11 (BKT-802)

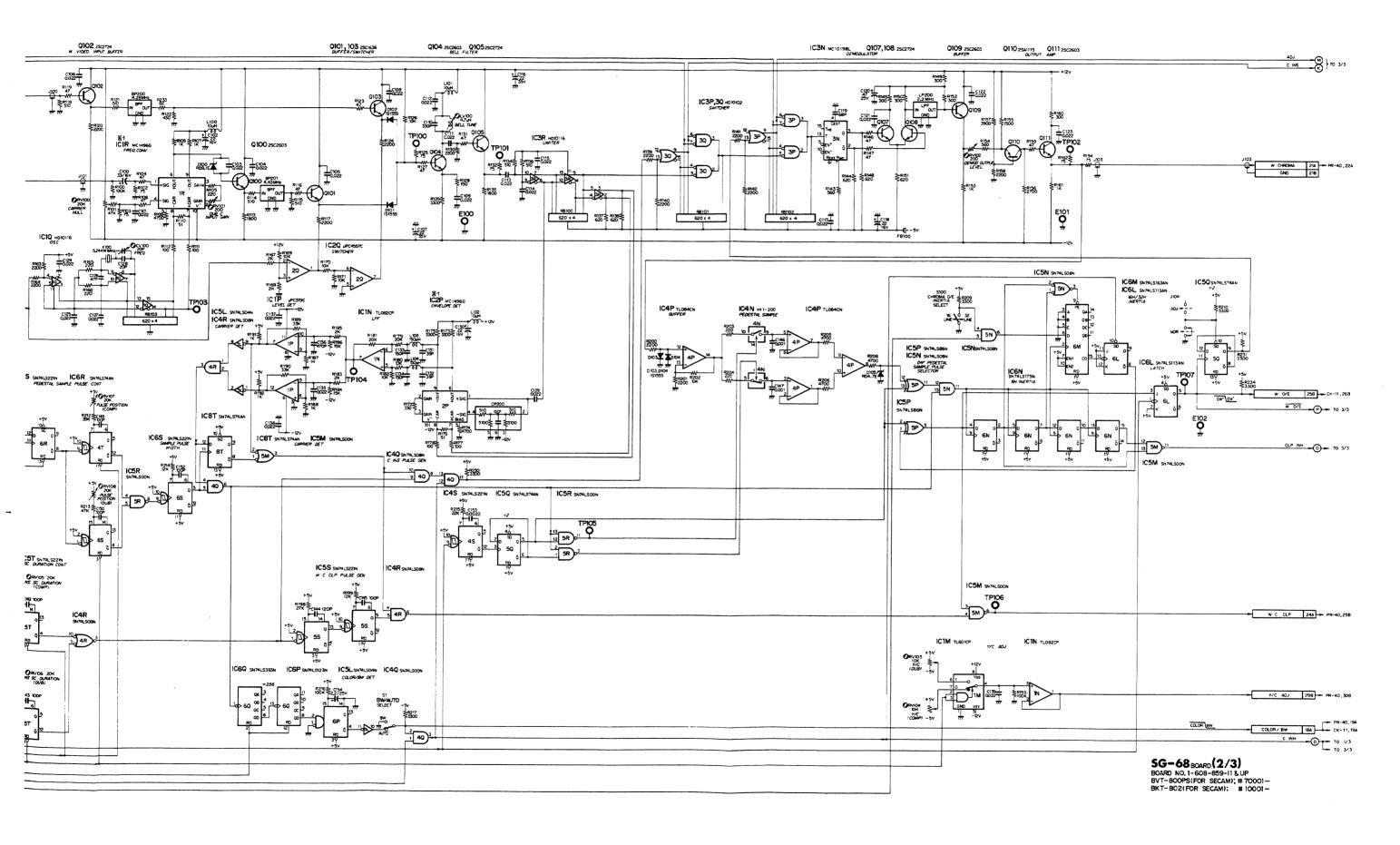
1 SG-68 BOARD (2/3); SECAM SYNC GEN

Chroma Separator (for COMP) Chroma Frequency Up Converter (for DUB)
DR'/DB' Demodulator SECAM Carrier Detector Chroma Insert Pulse Generator Write Odd/Even Generator Color/BW Detector Write Chroma Ciamp Pulse Generator



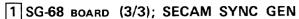
C-37 (BVT-800PS) C-15 (BKT-802)

C-38 (BVT-800PS) C-16 (BKT-802)



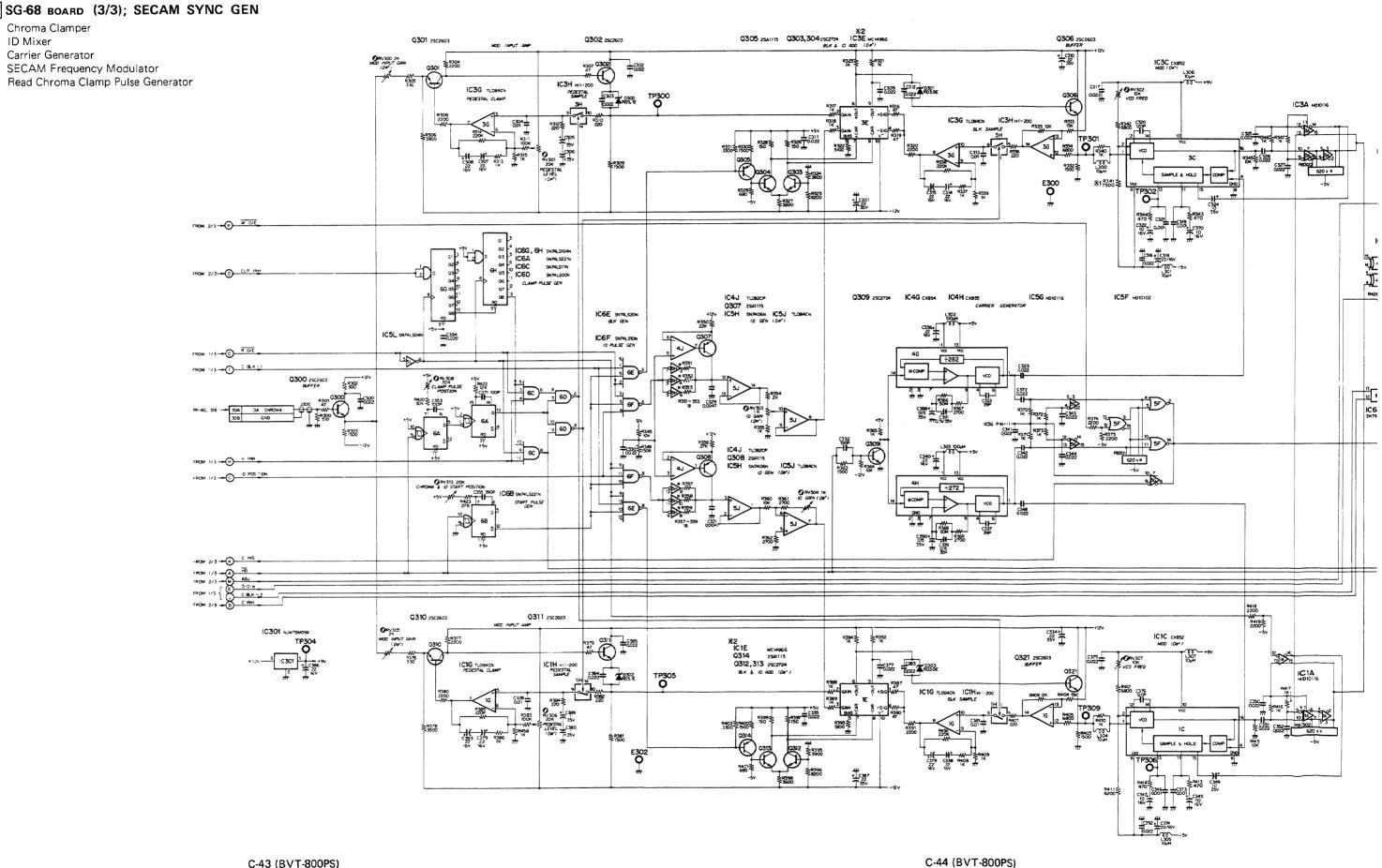
C-38 (BVT-800PS) C-16 (BKT-802)

C-39 (BVT-800PS) C-17 (BKT-802)

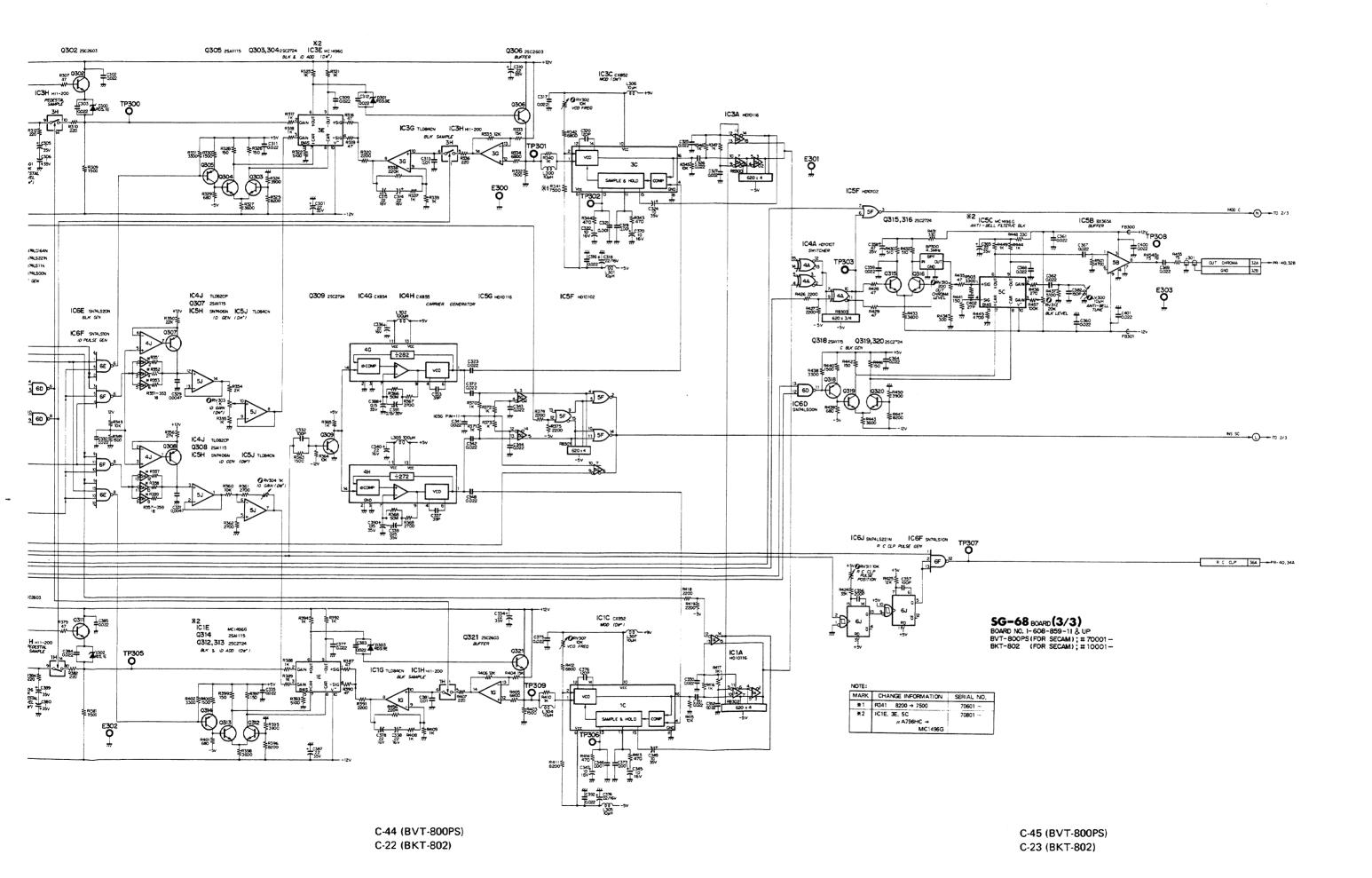


C-43 (BVT-800PS)

C-21 (BKT-802)

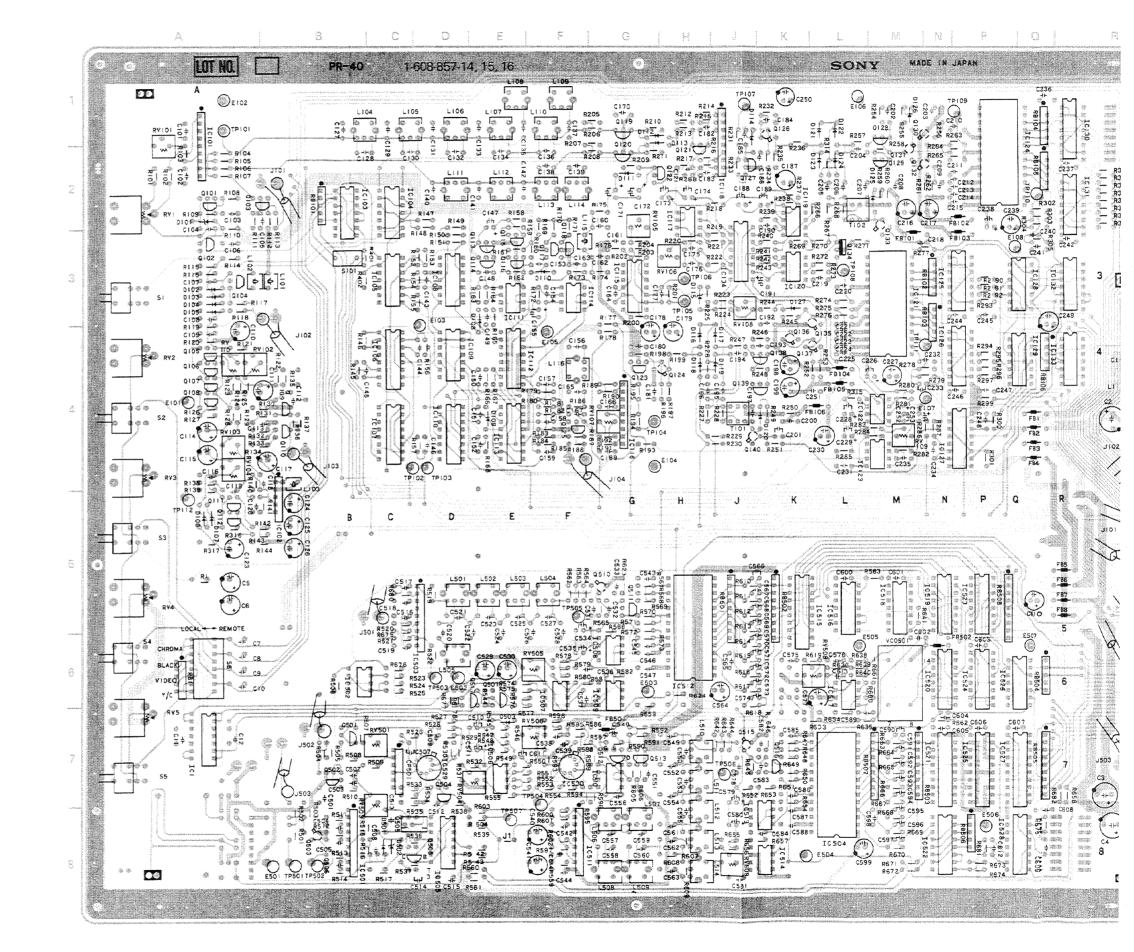


C-22 (BKT-802)



2 PR-40 PR-40 2

2 PR-40 BOARD (1-608-857-14, 15, 16)
Component Side



C-49

INPUT LEVEL

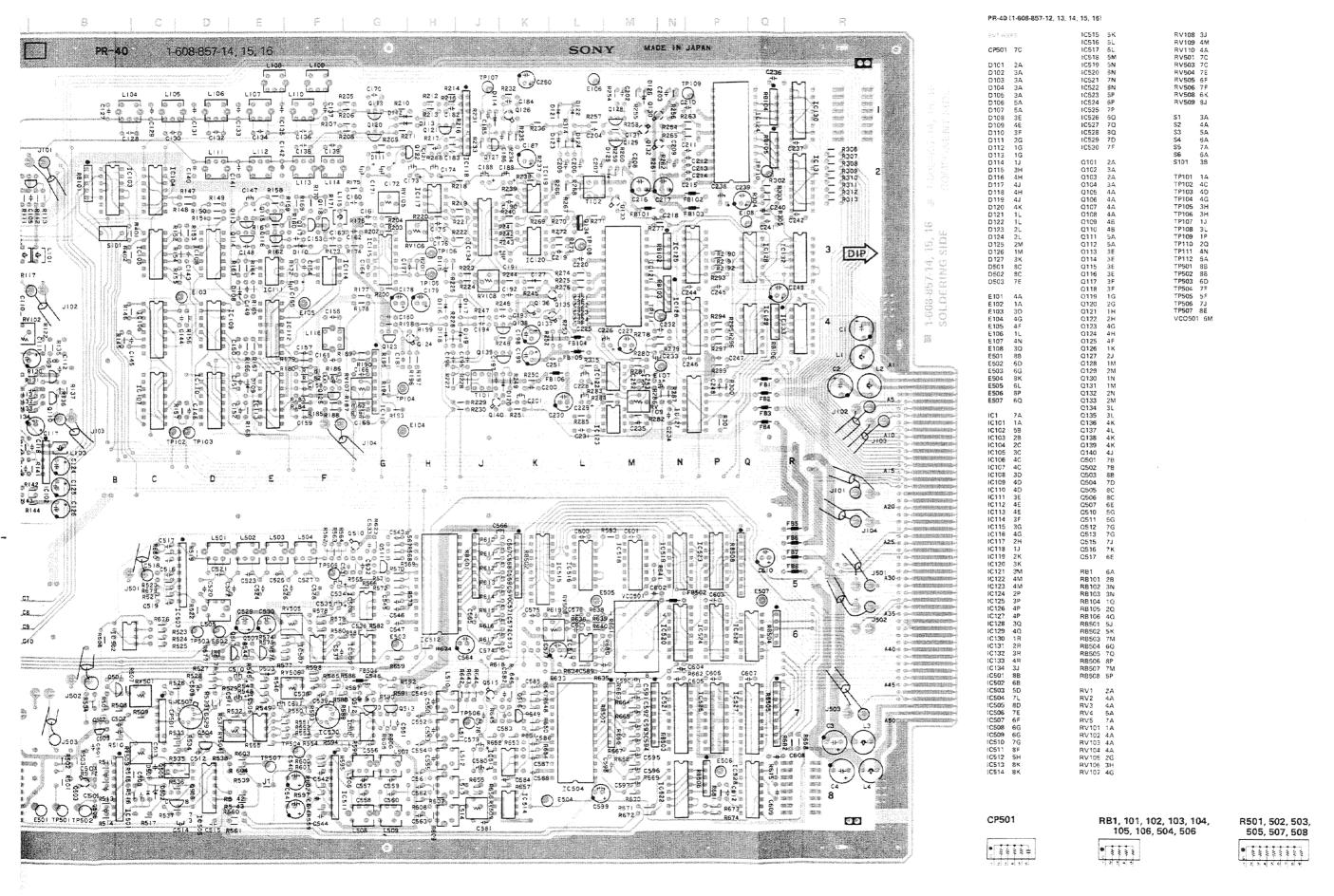
CHROMA

BLACK LEVEL

VIDEO

Y/C DELAY

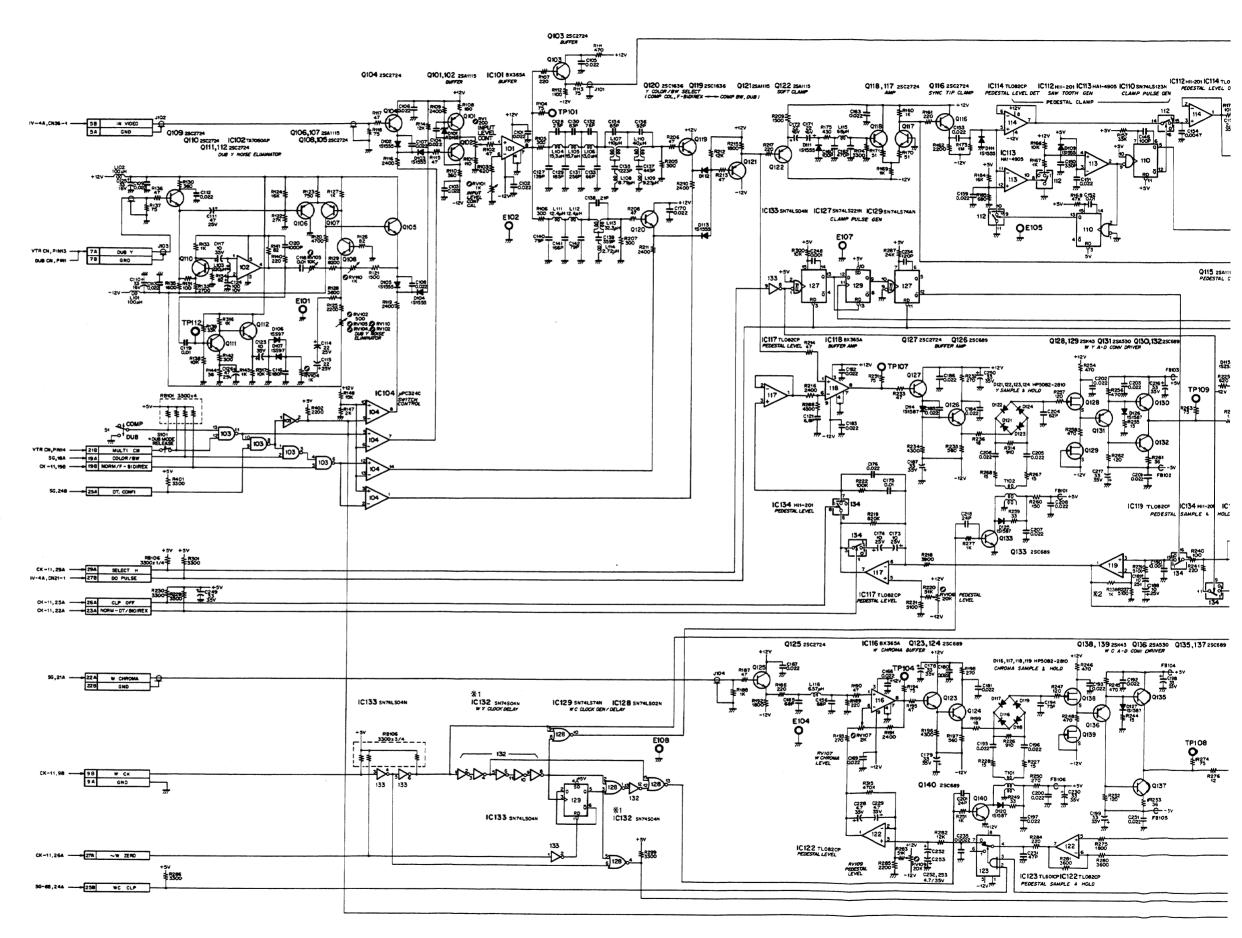
DUB



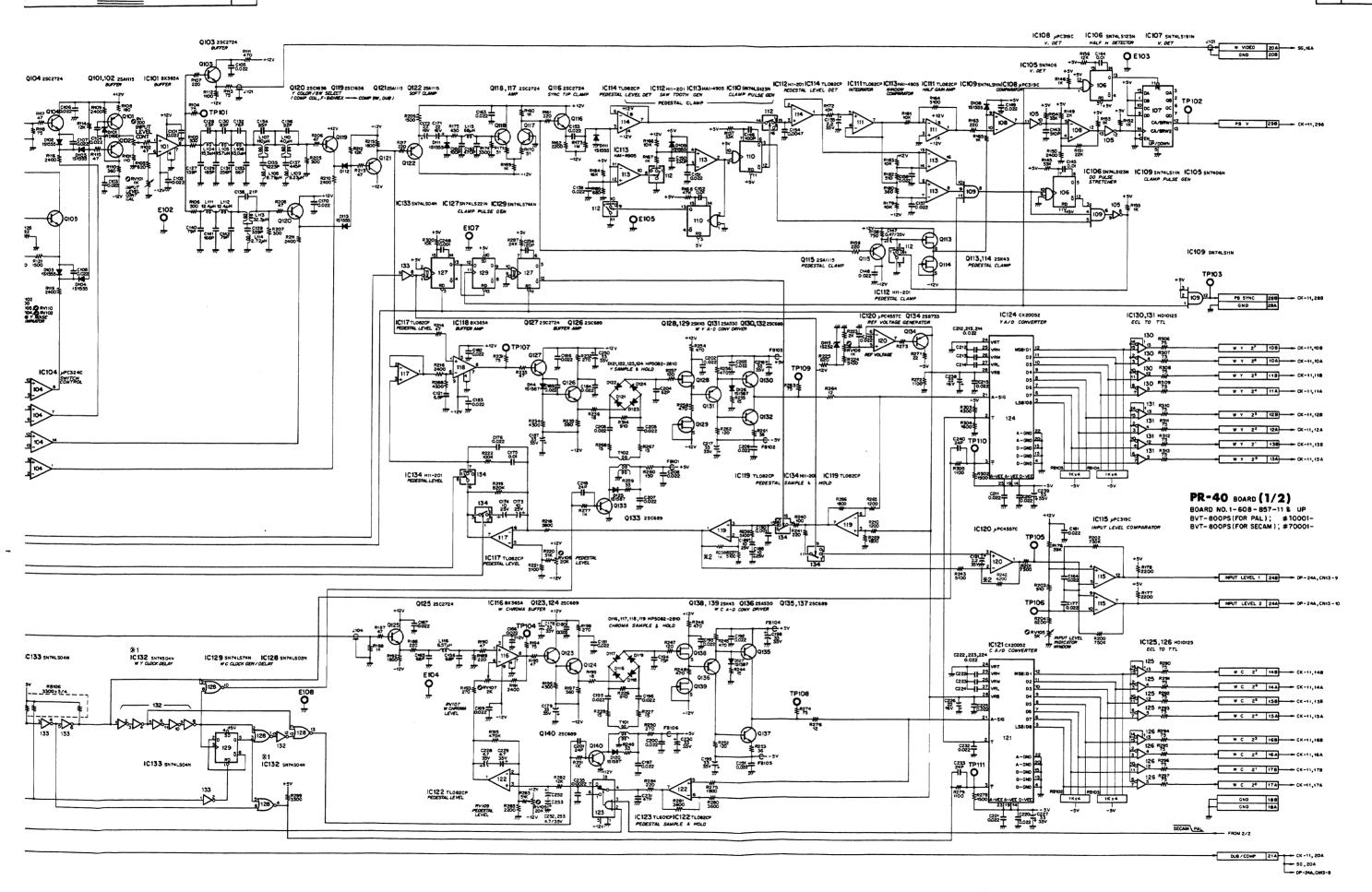
2 PR-40 BOARD (1/2); PROCESSOR

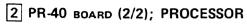
DUB Y Noise Eliminator Input Level Control Y Color/BW Select PB V, PB Sync Generator Y A-D Converter Input Level Detector C A-D Converter

MARK	CHAI	GE INFORMATION	SERIAL NO.	
*1	IC132	SN74LS04N →	P:	11901 ~
		SN74S04N	S:	70301 ~
* 2	R238	5100 → 1K	P:	14101 ~
	R242	5100 → 6200	S:	71101 ~

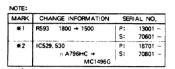


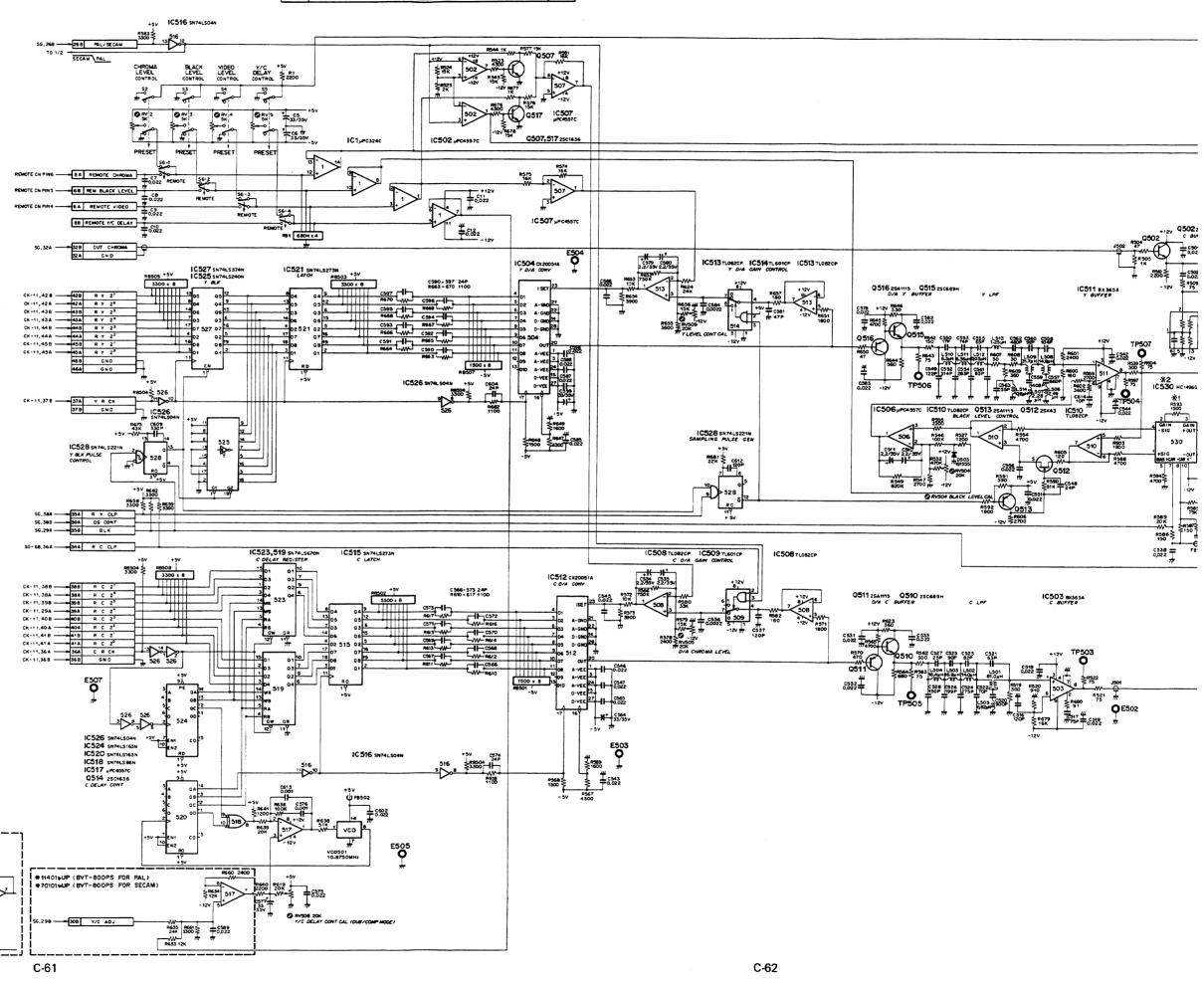
2

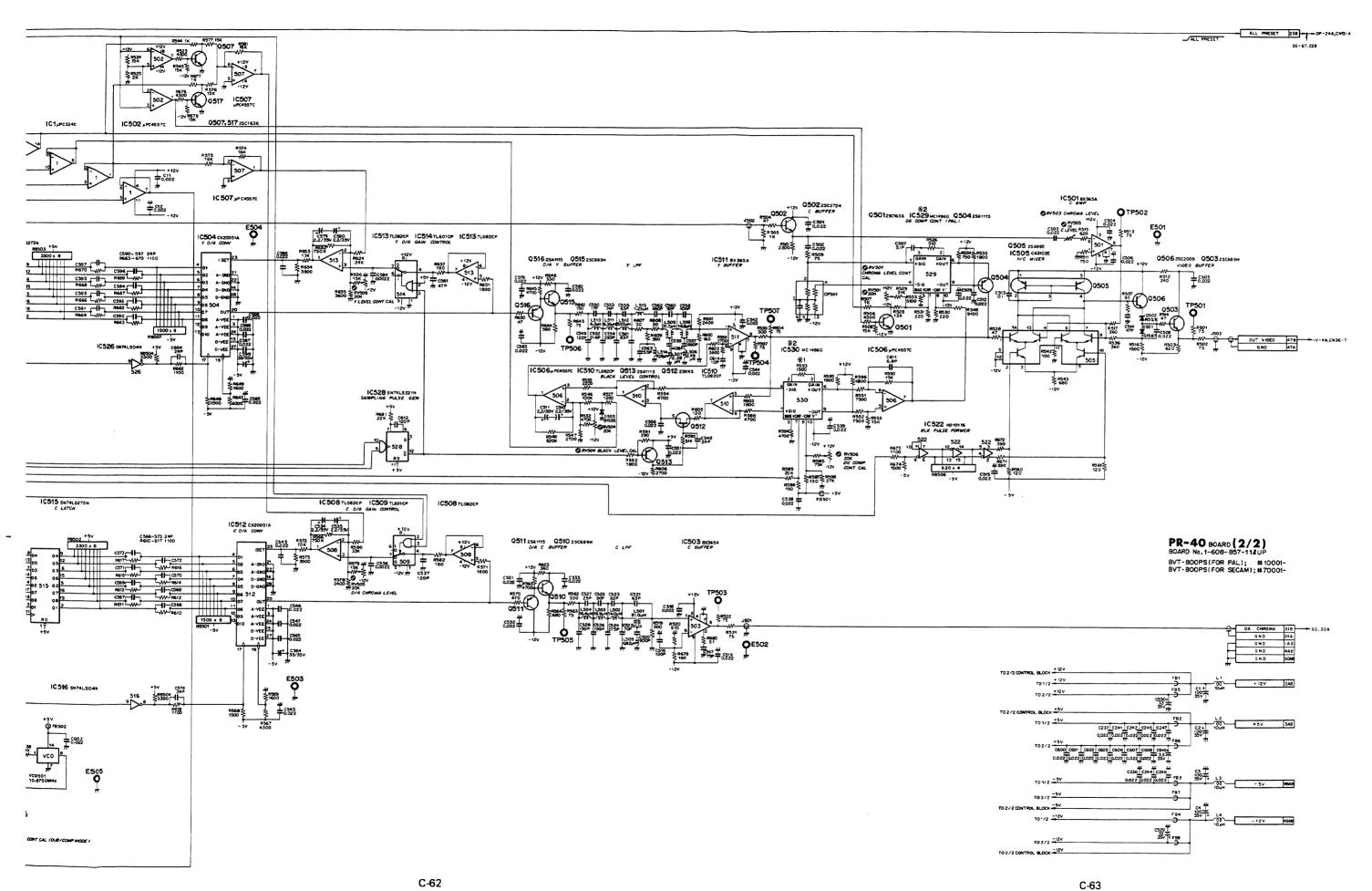




Y D-A Converter C D-A Converter Video, Chroma, Black Level Control Y/C Delay, DG Compensation Control







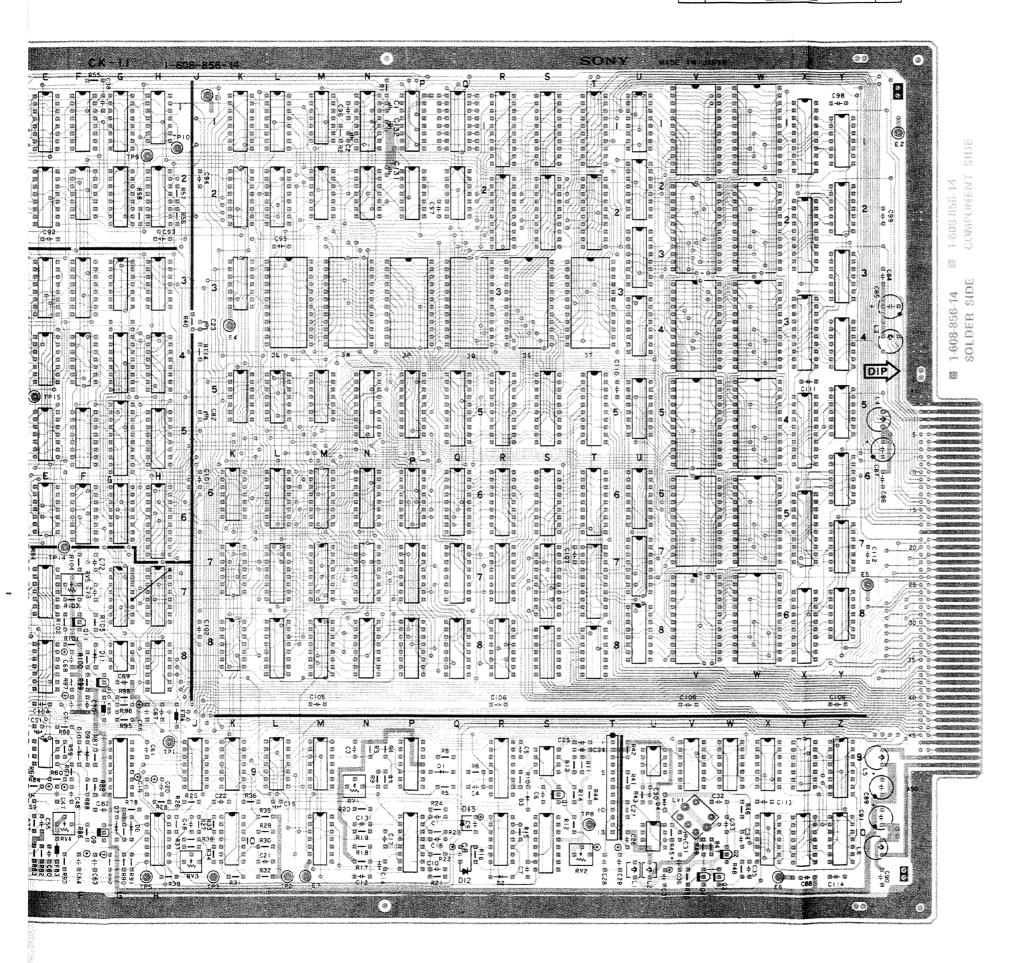
3 CK-11 CK-11 3

3 CK-11 BOARD (1-608-856-14)
Component Side

0-6 0-0 0-0 0-0 0-0 R51 C40 C43 C43 C43 C39 CB4 (+) (+) DIP) (0)

C-64

3 CLOCK GEN

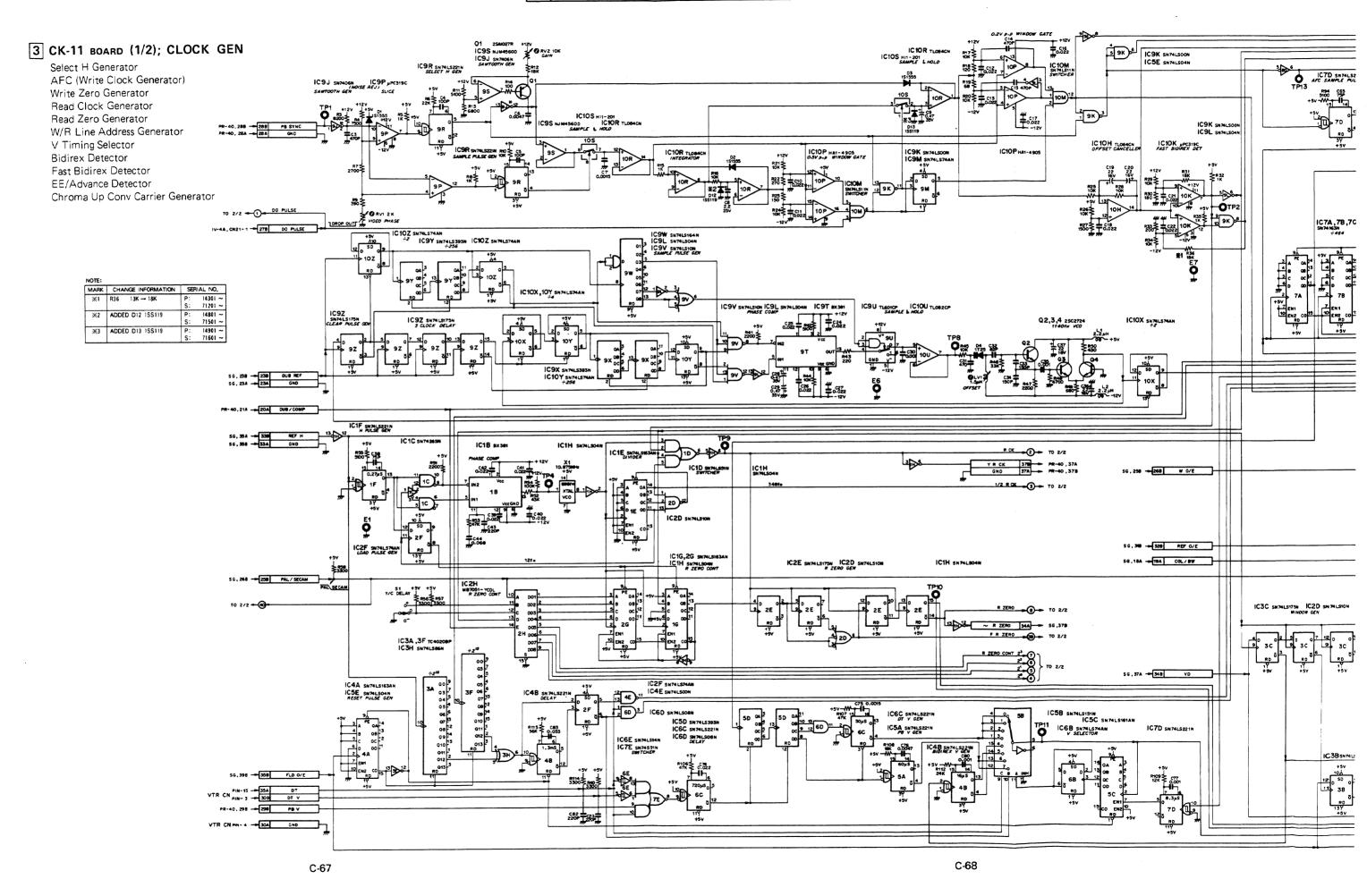


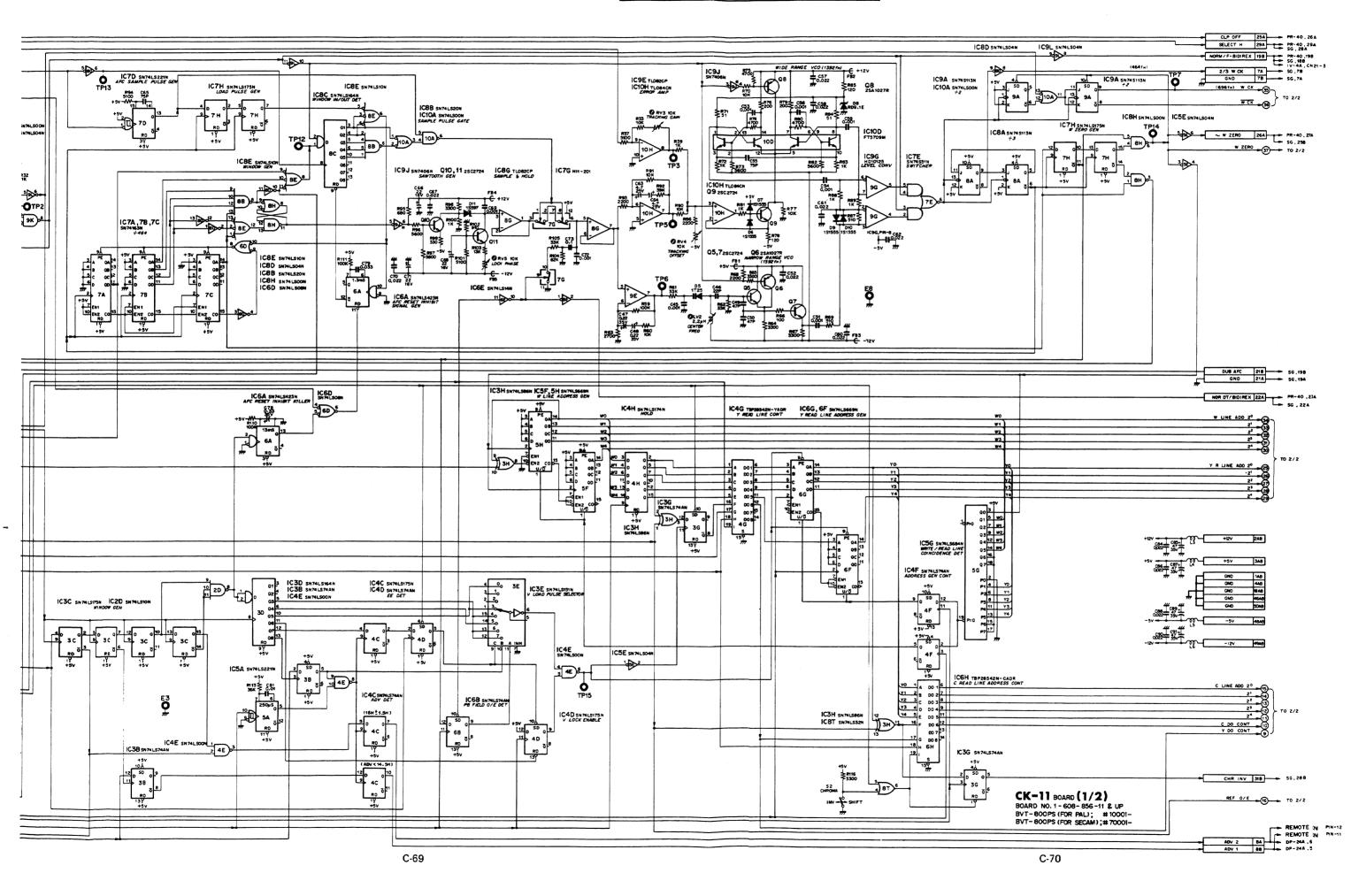
D1 D2 D3 D4 D5 D6 D7 D8 D9 D10 D11 D12 D13 9G 10R 9S 9U 10G 10G 10B 9F 8F 10Q 10Q 11Z 4D 4K 8Y 10M 10D E1 E2 E3 E4 E5 E6 E7 E8 | ICTR | ICTC |

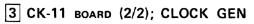
| IC10U | IC10X | IC10X | IC10X | IC10Y | IC10Z | IC10

X1

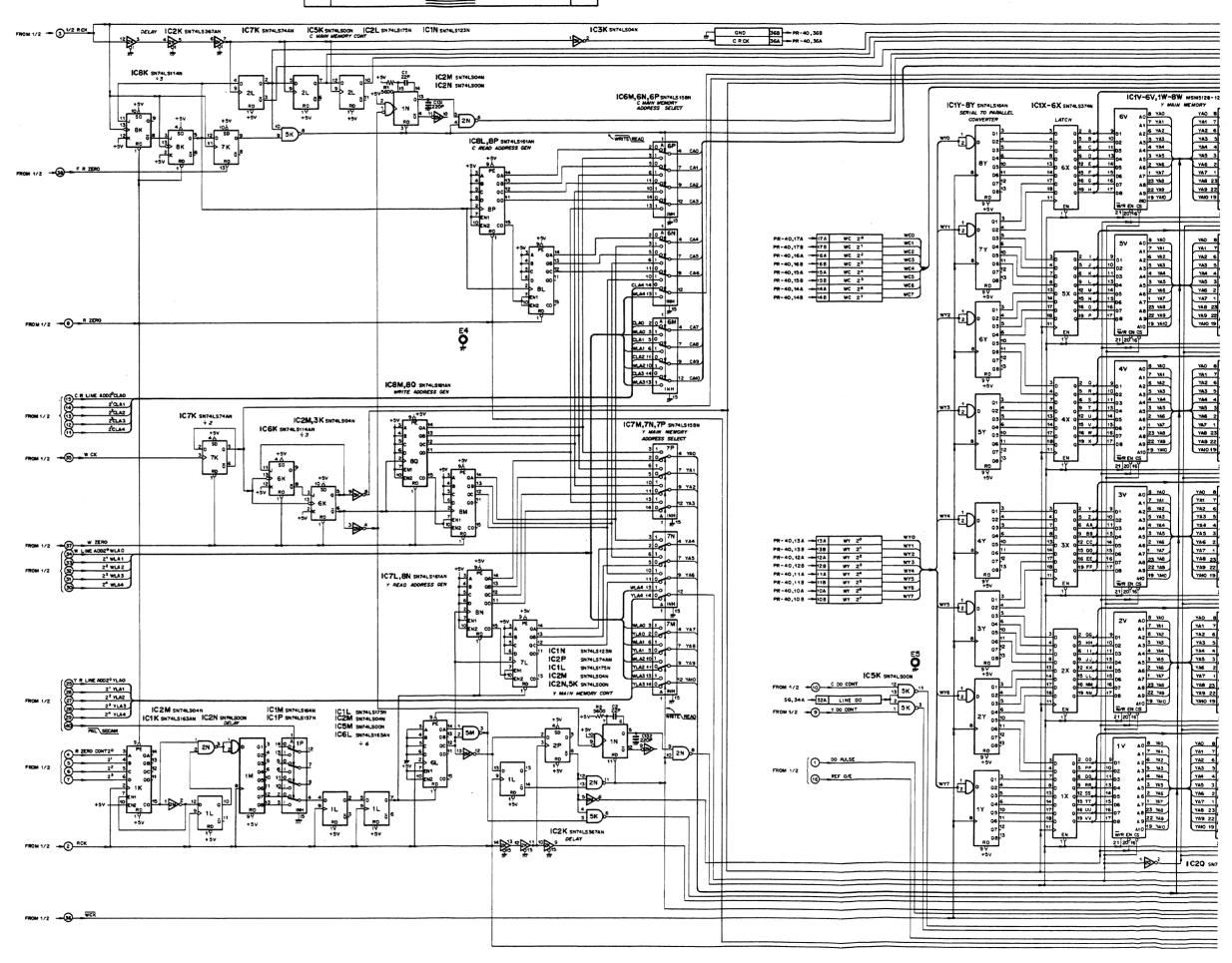
C-65

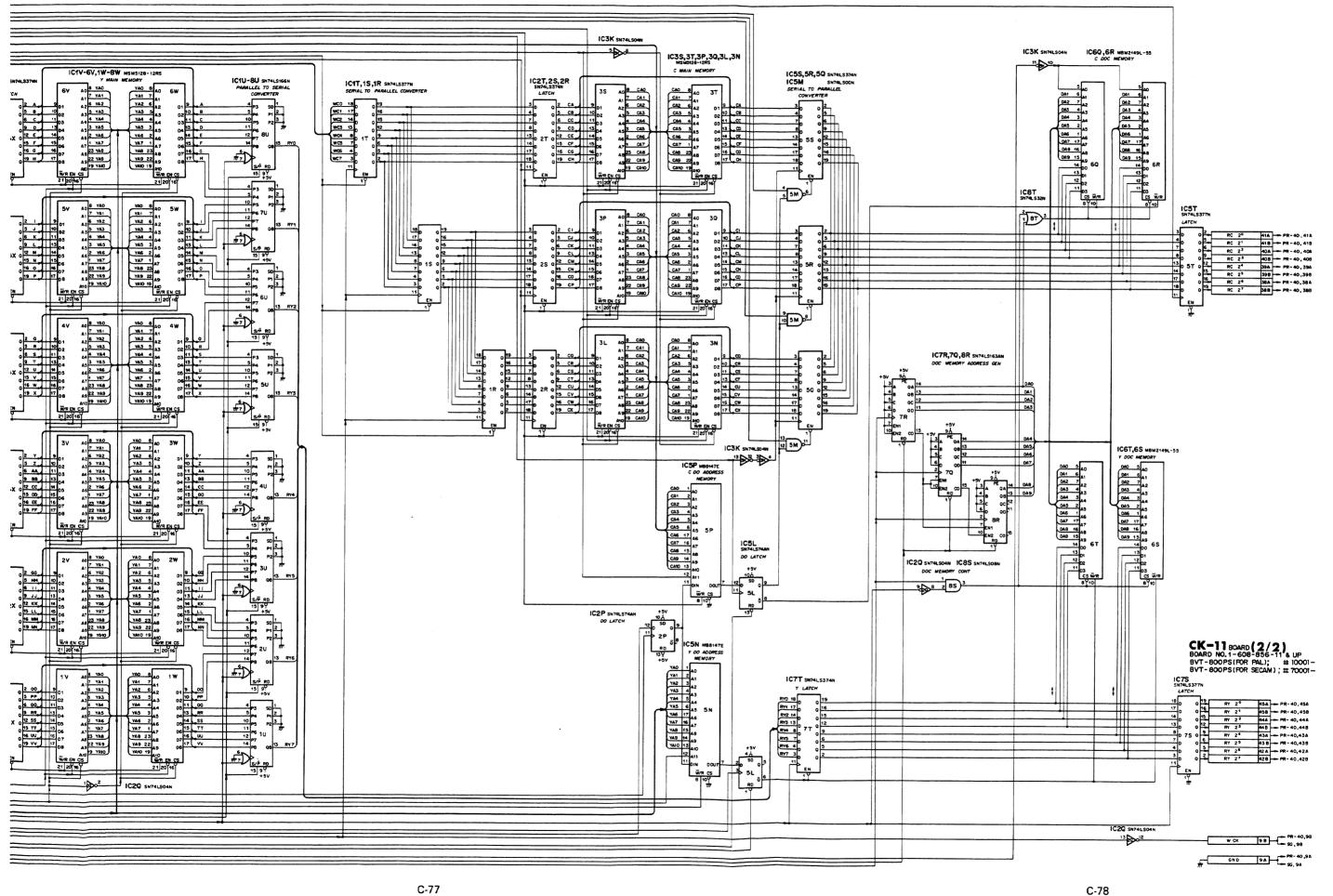






32-Line Main Memory DOC Memory Serial to Parallel Converter Main Memory W/R Address Generator





DP-24A E

CK-11,258 --[

PR~40,21A **--**€

58 . 444 ---

\$G,228 FR-40.236

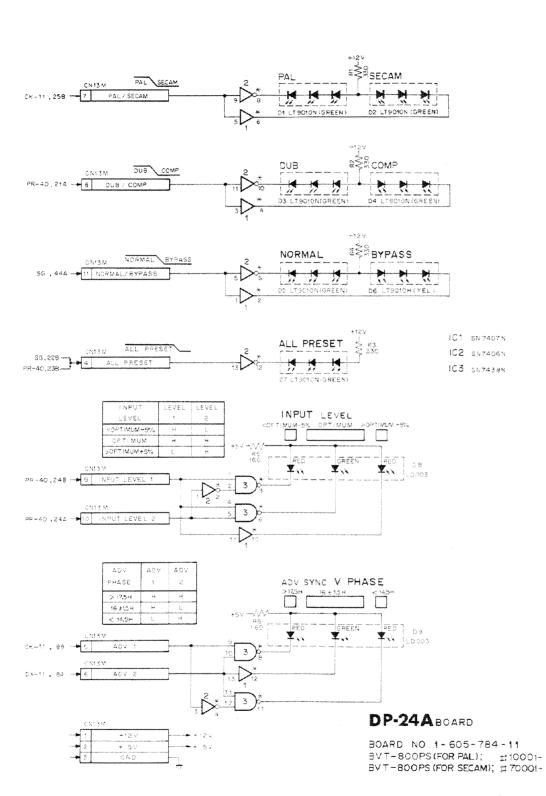
PR-40,2**48** →

99-40,24A -**=**

-11 , 98 **-⊭**[

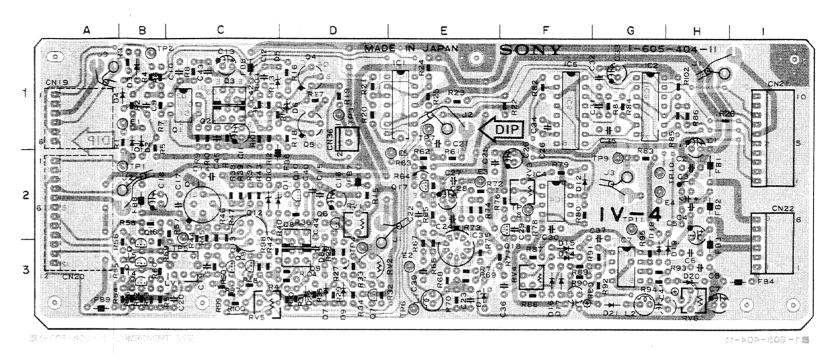
58-33 , **8**A --**●**

C-79



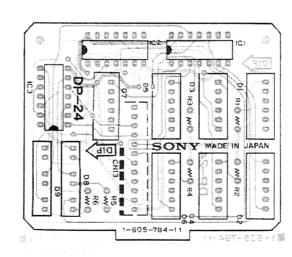
IV-4A BOARD (1-605-404-11)

Component Side



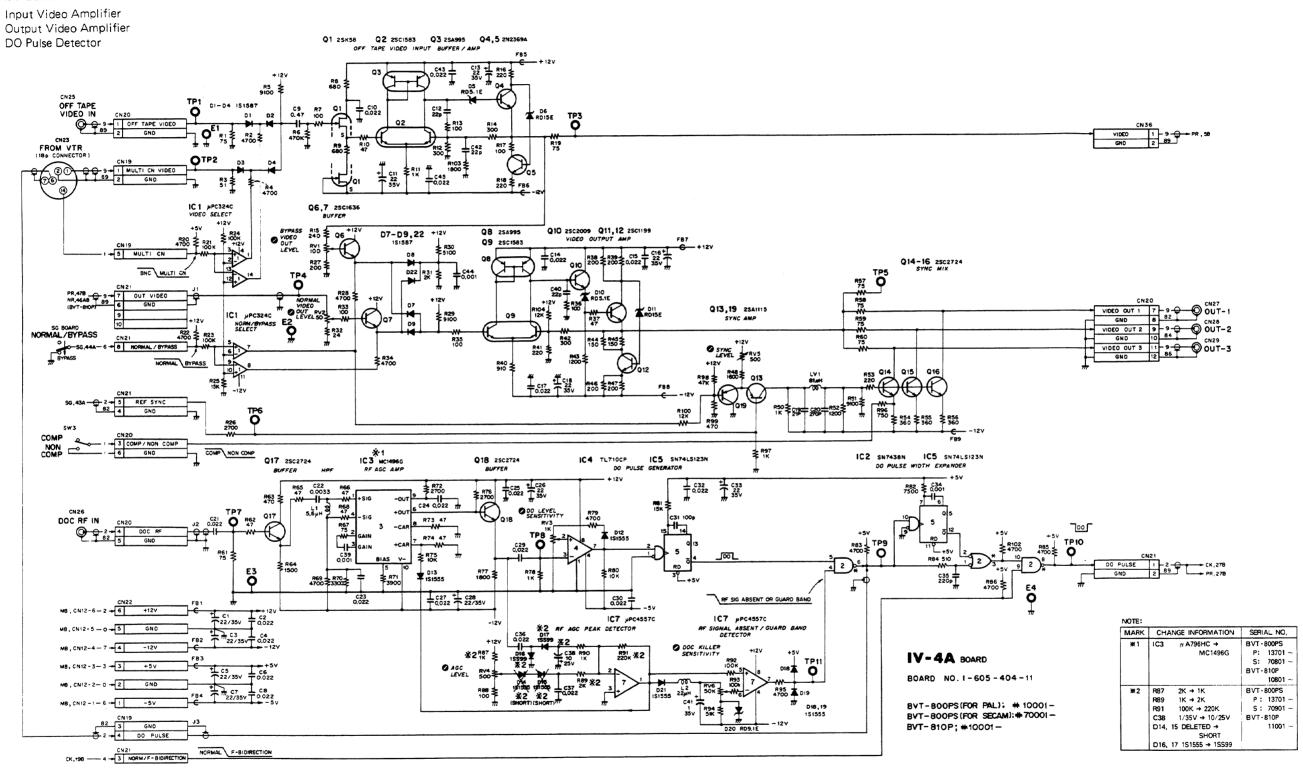
DP-24A BOARD (1-605-784-11)

Component Side



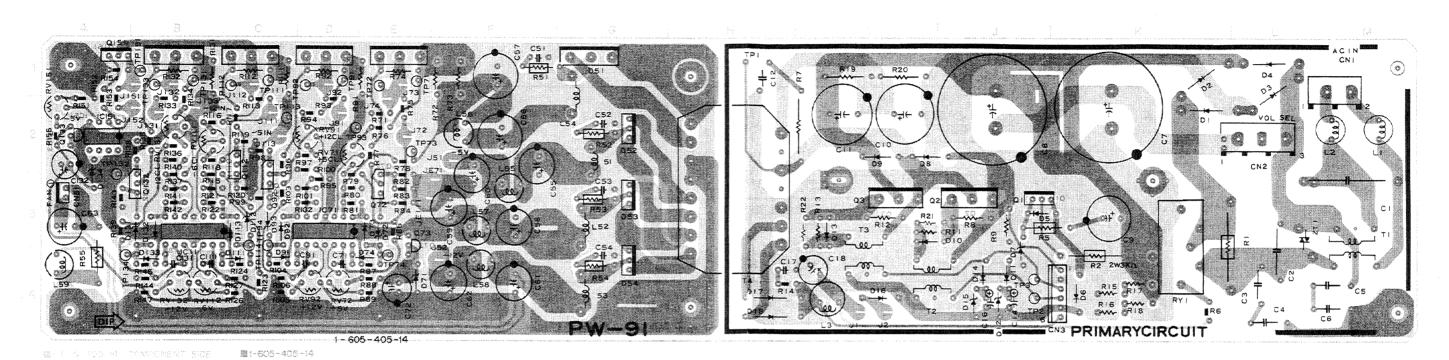
IV-4A	(1-605-404-11)								
5VT 800PS									
CN19	1A	IC1	16	TP1					
CN20	2A	IC2	1G	TP2					
CN21	11	1C3	3E	TP3					
CN22	21	IC4	25	TP4					
CN36	10	IC5	15	TP5					
		IC7	3G	TP6					
D1	18			TP7					
92	18	0.1	10	TP8					
03	18	0.2	10	TPG					
Ð4	18	0.3	10	TP10					
D5	10	04	1D	TP11					
D6	1D	Q5	1D						
D7	3D	Q6	20						
D8	3D	Q7	3D						
D9	3D	90	2D						
D10	20	09	30						
D11	20	010	20						
D12	2F	211	2C						
D13	3E	Q12	2C						
D14	3F	Q13	3C						
D15	3F	014	38						
016	3 F	0.15	38						
D17	3F	Q16	38						
810	3 G	017	26						
D19	3H	Q18	2F						
D20	3Н	Q19	3C						
D21	3G								
D22	3D	RV1	2D						
		8V2	3D						
E1	18	RV3	2F						
E2	36	RV4	3F						
E3	2€	RV5	3C						
£4	2G	RV6	3H						
£5	28								

IV-4A BOARD



PW-91A BOARD (1-605-405-14)

Component Side

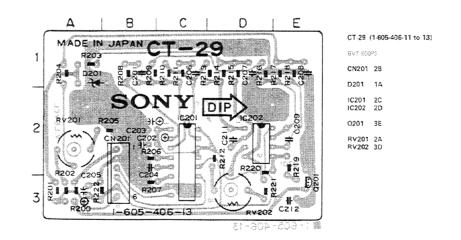


PW-91A (1-605-405-14)

871-800	PS				
CN1	1M	D132	38	TP1	1H
CN2	2L	D133	48	TP2	4.1
CN3	4K	0134	3A	TP3	4.1
CN51	3A			TP71	1E
		1071	3D	TP72	1E
D1	2K	IC111	38	TP73	2E
D2	1K			TP74	4E
D3	2L	Q1	3J	TP91	10
Ω4	11,	02	3J	TP92	10
05	3.1	Q3	31	TP93	2D
D6	4 K	Q71	18	7994	3C
D 7	4.3	Q72	3€	TP111	1C
D8	2:	Q73	38	TP112	10
D9	21	Q91	10	TP113	2C
D10	31	Q92	3C	TP114	3C
D11	4.3	2111	10	TP131	18
D12	4.1	Q112	2C	TP132	3A
D13	31	Q131	18	TP133	18
D14	4.1	Q132	38	TP134	44
D15	4.1	Q133	2A	TP151	18
016	41				
017	4H	RV71	2D	ZTI	3L
018	4H	RV72	4D		
D51	1G	BV91	2D	WIRING	TERMINAL
D52	2G	BV92	4D	172	25
D53	3G	RV111	28	J73	15
D54	4G	BV131	28	174	SE.
D71	45	RV132	4B	J91	2D
D72	3E	BV151	2A	J92	10
D73	3€			J111	2C
D74	4E			J112	1C
D91	4C			J131	28
D92	3C			J132	18
093	3C			J151	18
D111	4C			J152	28
D112	3C			JE71	3F
0113	3C			JE111	38
0131	3B				

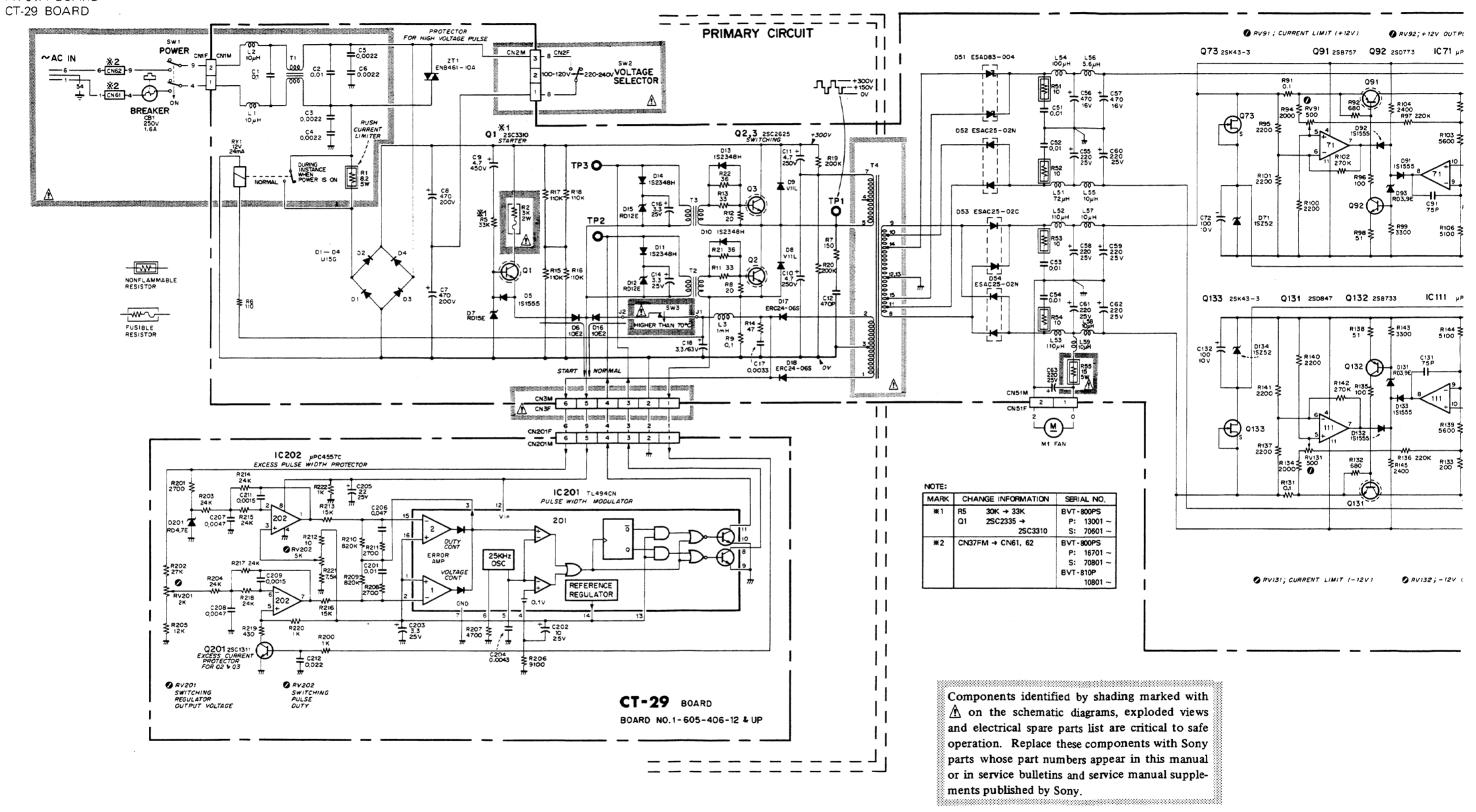
CT-29 BOARD (1-605-406-13)

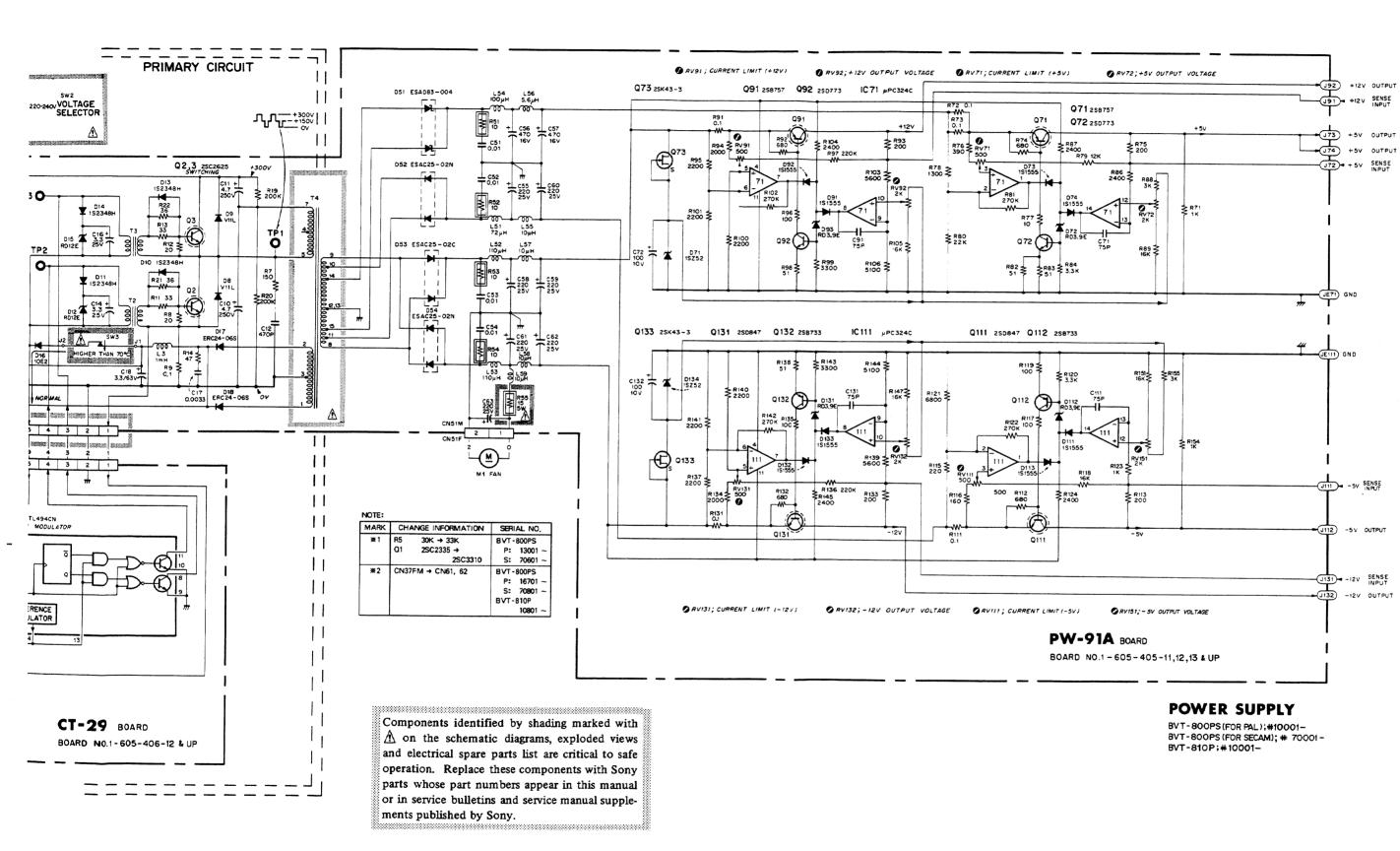
Component Side

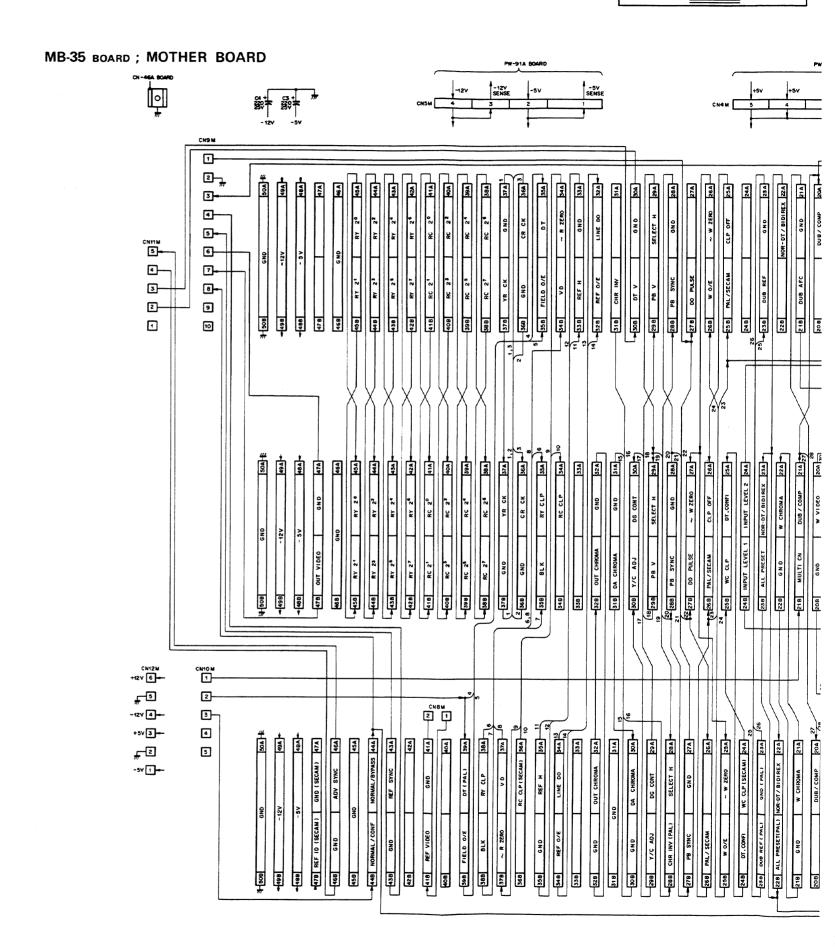


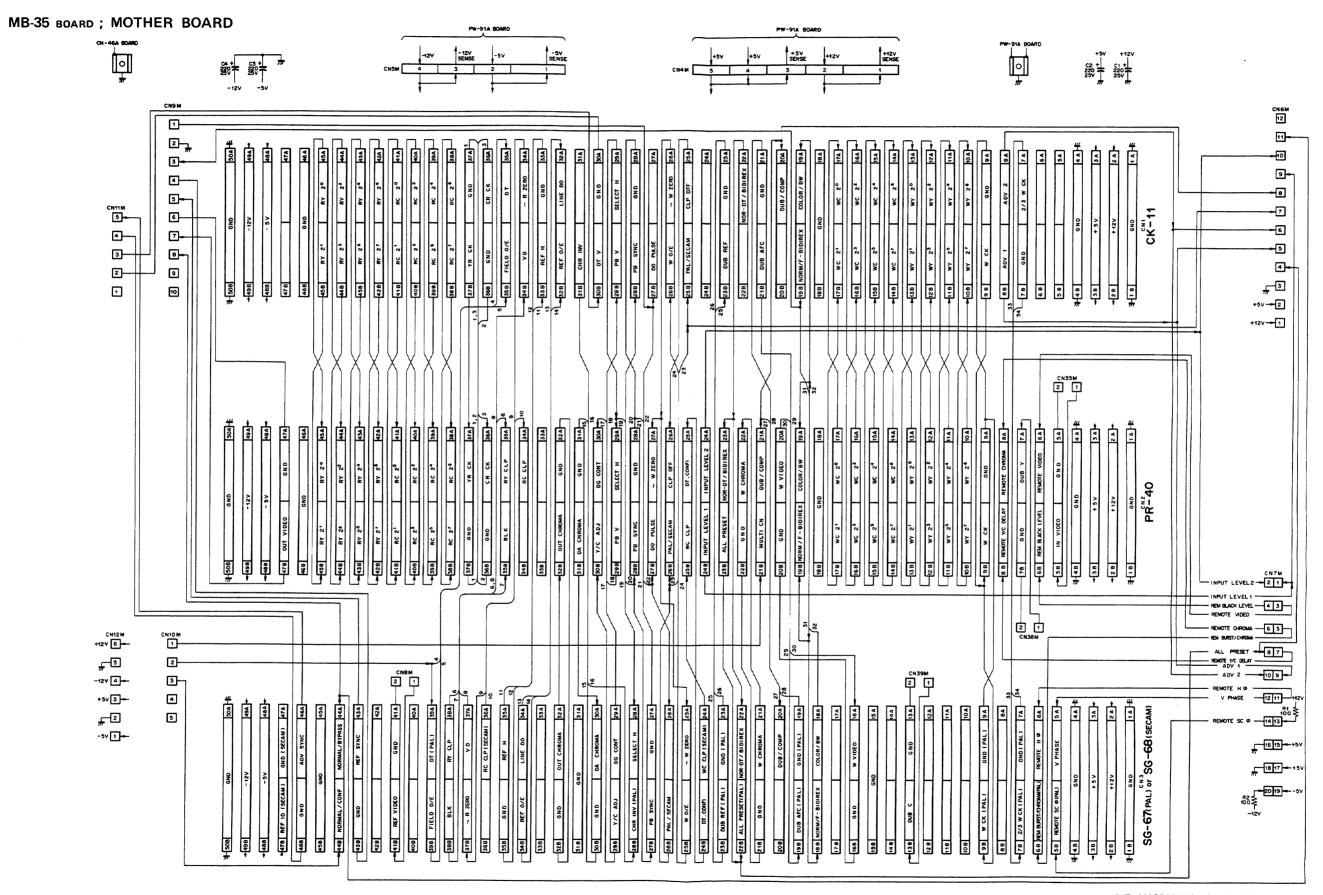
POWER SUPPLY

PW-91A BOARD









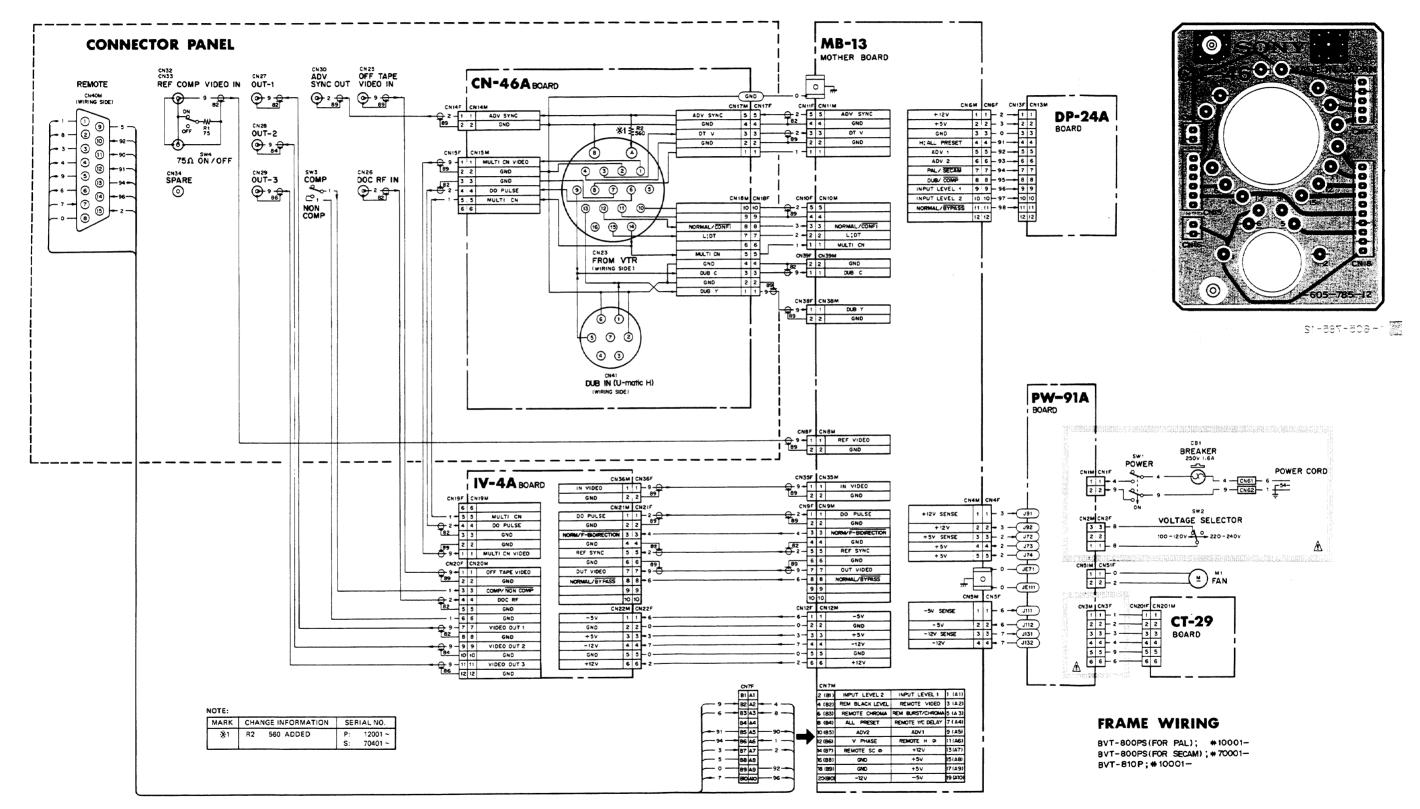
MB-35 BOARD BVT-800PS (FOR PAL) ; #10001-BOARD NO.1-608-855-11& UP

FRAME WIRING

CN-46A BOARD



Component Side



C-93

TOPTACAGE

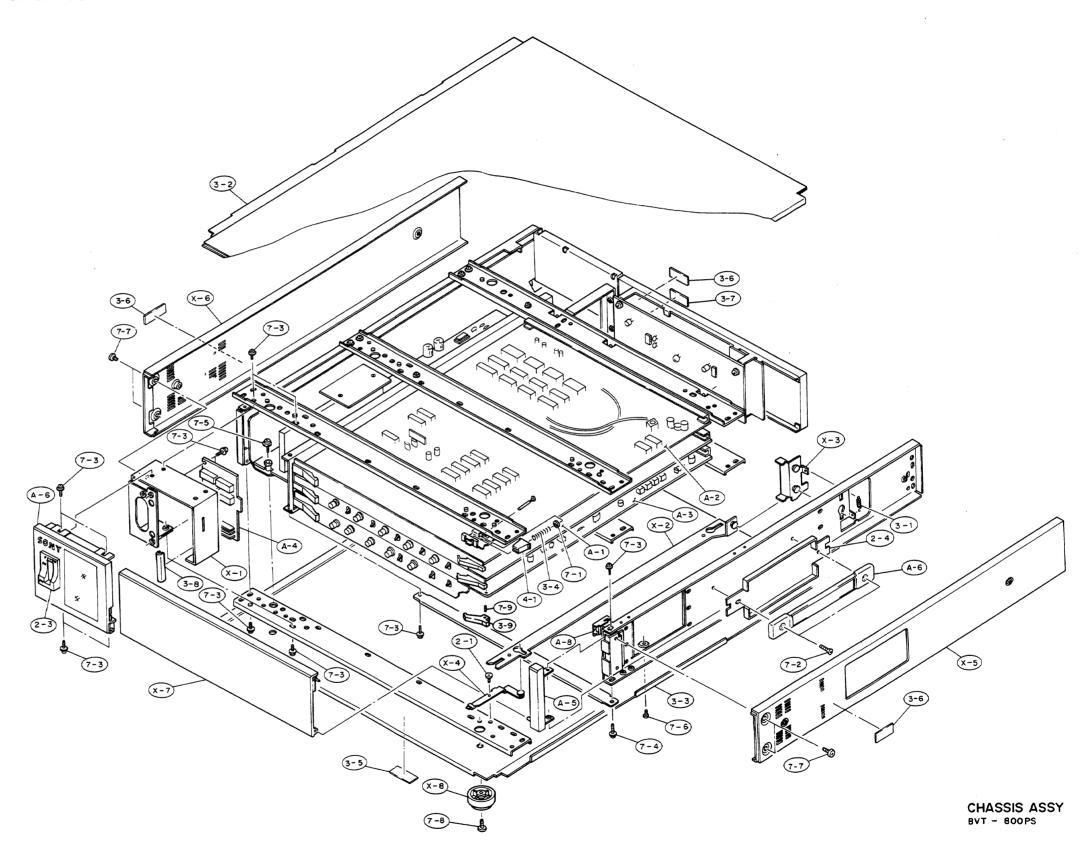
64

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SECTION D REPLACEABLE PARTS & OPTIONAL FIXTURES

CHASSIS ASSY (BVT-800PS)

	Part No.	Description
	A 0057 444 A	COMPLETE DCD DD 40
A-1	A-6257-111-A	
A-2	A-6259-216-A	
A-3	A-6258-217-A	-
	A COEO COA A	(for PAL)
	A-6258-231-A	COMPLETE PCB, SG-68
^ 1	A-6265-049-A	(for SECAM) COMPLETE PCB, DP-24A
A-4 A-5	A-6273-067-A	
A-6	A-6273-111-A	
A-0 A-7	X-2275-501-0	•
4-8	X-3673-215-3	BRACKET ASSY, LOCK
X-1	X-3673-201-2	BRACKET ASSY, PANEL
X-2	X-3673-202-0	
X-3	X-3673-203-0	
X-4	X-3673-207-0	LEVEL ASSY, STOPPER
X-5	X-3673-213-0	
X-6	X-3673-214-0	•
X-7	X-3673-217-0	PANEL ASSY, FRONT
X-8	X-4310-310-0	FOOT ASSY
2-1	2-236-956-01	SCREW, STEP
2-3	2-251-642-00	GUARD, POWER SWITCH
2-4	2-252-630-02	PLATE, ORNAMENTAL, HANDL
3-1	3-555-121-00	SPRING, TENSION
3-2	3-673-268-00	LID, UPPER
3-3	3-673-269-00	LID, BOTTOM
3-4	3-673-281-00	SPRING, COMPRESSION
3-5	3-703-043-21	LABEL, CAUTION, MAIN
3-6	3-703-082-21	LABEL, CAUTION
3-7	3-659-964-01	LABEL, CAUTION, GROUND
3-8	3-678-515-02	EDGING, RUBBER
3-9	3-673-249-00	LEVER, PC BOARD
4-1	4-335-962-00	BUTTON, PUSH
7-1	7-624-104-04	STOP RING, 2.0
7-2	7-682-264-09	SCREW, +K 4X14
7-3	7-686-527-01	SCREW, PSW 3X6
7-4	7-686-528-01	SCREW, PSW 3X8
7-5	7-686-530-01	SCREW, PSW 3X12
7-6	7-686-622-09	SCREW, B 3X4
7-7 7-0	7-686-634-09	SCREW, B 4X6
7-8	7-686-637-09	SCREW, B 4X12
7-9	7-626-320-11	PIN, SPRING 3X8



Description

Ref. No. Part No.

POWE	ER SUPPLY	ASSY (BVT-800/PS)
Ref. No	o. Part No.	Description
A-1	A-6263-036-A	COMPLETE PCB, PW-91 (for Japan, US/Canada)
	A-6263-042-A	COMPLETE PCB, PW-91A (for AEP)
A-2	A-6263-037-A	
<u>^</u> 1-1	1-570-117-31	SWITCH, SEESAW
<u>∱</u> 1-2	1-532-534-31	BREAKER, CIRCUIT, AC250V, 1.6A

A	1-3	1-534-517-00 CORD. POWER (for US/Canada)
5000000000		

1-534-535-14 CORD, POWER (for Japan) 1-556-559-31 CORD, POWER (for AEP)

1-4 1-541-170-00 MOTOR, FAN, DC

V	×			888		
Š.	/ <u>!</u> \	1-5	1-554-011-00	**	SWITCH, ROCKER	
ð,		************		.83	,	

A	1-6	1-563-112-1	1 CONNECTOR, DIVERGE
Morrose	ararararan da	0.0000000000000000000000000000000000000	~~~~~~~

<u>^</u> 2-1	2-234-904-00	STOPPER, CORD (for Japan)
2-2	2-252-609-00	COVER, FAN
2-3	2-280-622-11	SUPPORT, HEXAGON
3-1	3-630-415-00	SCREW, STEP
3-2	3-680-316-00	NUT, NYLON, 4
3//000000000000000000000000000000000000		
<u>^</u> 3-3	3-649-728-00	STOPPER, CORD (for US/Canada)

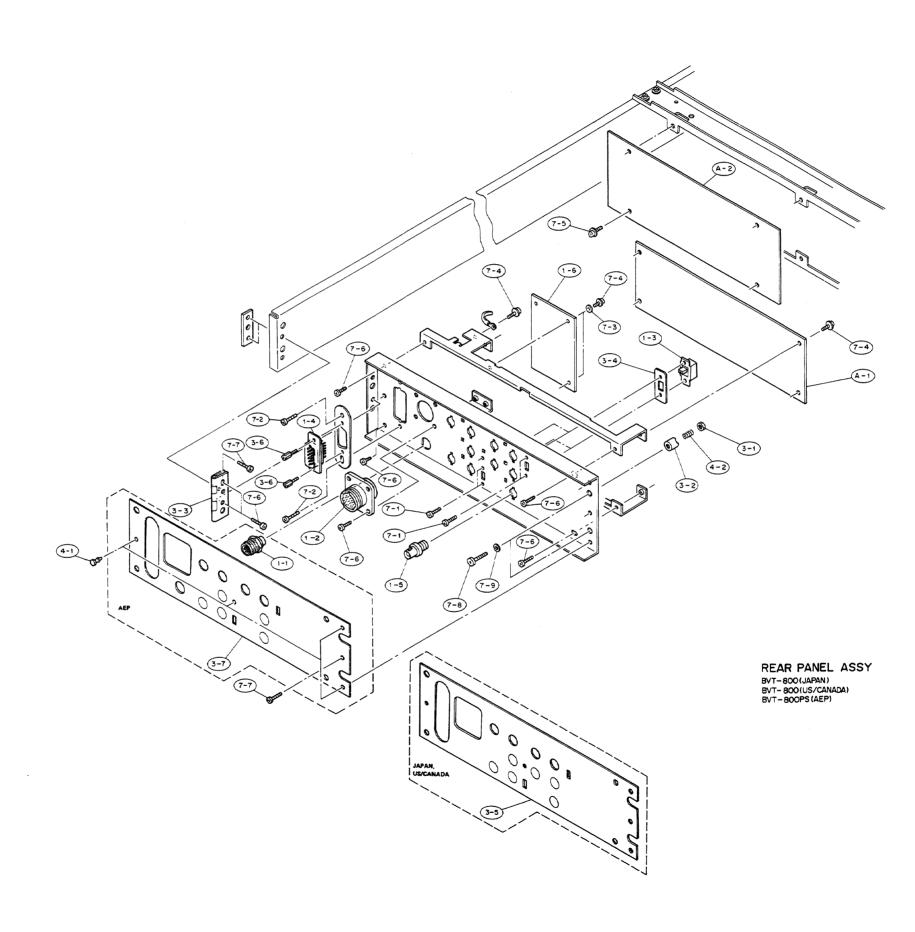
3-4	3-650-188-00	COLLAR, 6mm DIA
3-5	3-651-849-00	SPACER, PANEL
3-6	3-673-211-00	PANEL, RIGHT CONNECTOR

) }	3-7	3-673-298-00	STOPPER, CORD (for AEP)
	3-8	3-701-443-21	WASHER, NYLON, 5
	4-1	4-812-134-11	RIVET, NYLON, 3.5
	4-2	3-303-890-01	SPRING, COMPRESSION
	7-1	7-621-981-25	SCREW, PSW 2.6x8
	7-2	7-621-981-35	SCREW, PSW 2.6x10
	7-3	7-623-923-11	WASHER, NYLON, 2.6
	7-4	7-682-247-09	SCREW, + K 3x6
	7-5	7-686-527-01	SCREW, PSW 3x6

		Description .	
7-6 7-8	7-686-528-01 7-686-548-01	SCREW, PSW 3x8 SCREW, PSW 4x8 (for US/Canada, AEP)	
7-9 7-10	7-686-623-09 7-686-624-09	SCREW, B3x5 SCREW, B3x6	
7-11 7-12 7-13	7-686-640-09 7-686-643-09 7-688-004-12	SCREW, B4x20 SCREW, B4x40 WASHER, MIDDLE, 4	
		7-5	
		(A)	
		7-9	3-6 4-1 7-10
		7-5	000000000000000000000000000000000000000
		A-1 72 7-1 7-1 7-1 7-1 7-1 7-1 7-1 7-1 7-1 7-1	7-12
		7-6	13
7-5			
Office .			
		3-2	POWER SUPPLY ASSY BVT-800 (JAPAN) BVT-800 (US/CANADA) BVT-800PS(AEP)

REAR PANEL ASSY (BVT-800/PS)

A-1 A-6257-101-A COMPLETE PCB, IV-4 (for Japan, US/Canada) A-6257-112-A COMPLETE PCB, IV-4A (for AEP) A-2 A-6265-046-A COMPLETE PCB, MB-16 (for Japan, US/Canada) A-6265-050-A COMPLETE PCB, MB-35 (for AEP) 1-1 1-508-945-00 RECEPTACLE, 7P, MALE RECEPTACLE, 18P, MALE
A-6257-112-A COMPLETE PCB, IV-4A (for AEP) A-2 A-6265-046-A COMPLETE PCB, MB-16 (for Japan, US/Canada) A-6265-050-A COMPLETE PCB, MB-35 (for AEP) 1-1 1-508-945-00 RECEPTACLE, 7P, MALE RECEPTACLE, 18P, MALE
A-2 A-6265-046-A COMPLETE PCB, MB-16 (for Japan, US/Canada) A-6265-050-A COMPLETE PCB, MB-35 (for AEP) 1-1 1-508-945-00 RECEPTACLE, 7P, MALE 1-2 1-509-470-00 RECEPTACLE, 18P, MALE
(for AEP) 1-1 1-508-945-00 RECEPTACLE, 7P, MALE 1-2 1-509-470-00 RECEPTACLE, 18P, MALE
1-2 1-509-470-00 RECEPTACLE, 18P, MALE
1-3 1-552-822-00 SWITCH, SLIDE 1-4 1-560-495-00 RECEPTACLE, D-SUB 15P, MALE
1-4 1-560-495-00 RECEPTACLE, D-SUB 15P, MALE 1-5 1-561-781-21 RECEPTACLE, BNC
1-6 1-605-785-00 PC BOARD, CN-46
10 100 700 00 10 Dolling, civile
3-1 3-680-316-00 NUT, NYLON, 4
3-2 3-651-849-00 SPACER, PANEL
3-3 3-658-816-00 HINGE, FRONT
3-4 3-673-205-00 SPACER, SWITCH
3-5 3-673-261-00 PANEL, CONNECTOR
(for Japan, US/Canada)
3-6 3-673-910-00 SCREW, CONNECTOR
3-7 3-678-501-00 PANEL, CONNECTOR
(for AEP)
4-1 4-812-134-11 RIVET, NYLON, 3.5
4-2 3-303-890-01 SPRING, COMPRESSION
4-2 3-303-030-01 31 111140, 00/11111201014
7-1 7-621-555-30 SCREW, + K 2x5
7-2 7-621-912-30 SCREW, B2.6x6
7-3 7-623-924-11 WASHER, NYLON, 3
7-4 7-686-527-01 SCREW, PSW 3x6
7-5 7-686-528-01 SCREW, PSW 3x8
7-6 7-686-623-09 SCREW. B3x5
7-7 7-686-624-09 SCREW, B3x6
7-8 7-686-640-09 SCREW, B4×20
7-9 7-688-004-12 WASHER, MIDDLE, 4



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		•

Ref. No.			Ref. No.		
or Q'ty	Part No.	Description	or Q'ty	Part No.	Description
SG-67 B	OARD (BVT	-800PS/BKT-801) FOR PAL	(SG-67 BO	ARD, BVT-800PS	S/BKT-801 FOR PAL)
			C12, 15, 22	2, 24, 42, 51, 62,	
1 PC	A-6259-217-A	COMPLETE PCB, SG-67	71, 78, 80), 81, 209, 257,	
	•	t board is not available,	262		
order as a B	KT-801.			1-123-342-00	CAP, ELECT 22 35V
(This assem	bly includes the f	following parts.)	C2, 4, 6, 8	1-123-344-00	CAP, ELECT 47 35V
C59	1-102-114-00	CAP, CERAMIC 470PF 10% 50V		74, 82, 246,	
C39	1-107-076-00	CAP, MICA 43PF 5% 50V	280, 286,	1-130-471-00	CAP, MYLAR 0.001 5% 50V
C11, 207, 2	08, 258, 259				·
	1-107-081-00	CAP, MICA 68PF 5% 50V	C49	1-130-473-00	CAP, MYLAR 0.0015 5% 50V
C245	1-107-083-00	CAP, MICA 82PF 5% 50V	C26, 210, 2	278, 283, 515	
02.10		C. II., M. I. C.		1-130-475-00	CAP, MYLAR 0.0022 5% 50V
C67, 279, 2	81, 282, 284,				
285, 287,	554, 567, 568			00 1-130-483-00	CAP, MYLAR 0.01 5% 50V
	1-107-085-00	CAP, MICA 100PF 5% 50V	C14, 17	1-130-487-00	CAP, MYLAR 0.022 5% 50V
				1-130-489-00	CAP, MYLAR 0.033 5% 50V
C28	1-107-157-00	CAP, MICA 27PF 5% 500V	C34, 263	1-130-491-00	CAP, MYLAR 0.047 5% 50V
C256, 512,	513, 537, 5 38		C43, 45, 54	1, 247	
, - ·,	1-107-159-00	CAP, MICA 33PF 5% 500V		1-130-495-00	CAP, MYLAR 0.1 5% 50V
C88	1-107-202-00	CAP, MICA 10PF 5% 500V		521, 522, 545,	
C10, 40	1-107-206-00	CAP, MICA 15PF 5% 500V	546	1-131-347-00	CAP, TANT 1 10% 35V
C231 235	254, 273, 524,			1-101-047-00	0A1, 1A11 1 10% 00 0
548	204, 270, 024,		C32, 294	1-131-355-00	CAP, TANT 2.2 10% 25V
	1-107-210-00	CAP, MICA 22PF 5% 500V	C47, 55	1-131-359-00	CAP, TANT 10 10% 25V
000 E00 E			C201 202	214, 216, 218,	
C33, 520, 5	1-10 9 -539-00	CAP, MICA 150PF 5% 100V		264, 265, 502,	
	1-109-539-00	CAP, WICA 190PP 5% 100V		558, 560, 563	
C244	1-109-540-00	CAP, MICA 180PF 5% 100V	027, 002,	1-131-373-00	CAP, TANT 22 10% 16V
C505, 530	1-109-547-00	CAP, MICA 330PF 5% 100V			
C556	1-109-549-00	CAP, MICA 390PF 5% 100V	C56, 238, 2	250, 270, 274	
	1-109-553-00	CAP MICA 470PF 5% 100V	,,	1-161-039-00	CAP, CERAMIC 0.001 10% 50V
C68	1-109-555-00	CAP, MICA 560PF 5% 100V			• •
			C1, 3, 5, 7,	13, 16, 19, 21, 2	3, 25, 29, 30, 31, 35, 36,
C222	1-109-747-00	CAP, MICA 23PF +/-0.5PF 100V	37, 38, 41	, 44, 48, 50, 52,	53, 57, 58, 60, 61, 63, 65,
C228	1-109-753-00	CAP, MICA 57PF 1% 100V	66, 70, 73	3, 75, 76, 77, 79,	83, 84, 85, 86, 87, 89,
C226	1-109-756-00	CAP, MICA 76PF 1% 100V	203, 204,	205, 206, 211, 2	12, 213, 215, 217, 219,
C224	1-109-758-00	CAP, MICA 83PF 1% 100V	220, 232,	233, 234, 236, 2	37, 239, 241, 248, 249,
C507, 532	1-109-759-00	CAP, MICA 91PF 1% 100V	251, 252,	253, 255, 266, 2	67, 268, 269, 271, 272,
			275, 276,	277, 288, 289, 2	92, 293, 295, 296, 297,
C221	1-109-768-00	CAP, MICA 139PF 1% 100V			03, 504, 506, 508, 509,
C223	1-109-770-00	CAP, MICA 185PF 1% 100V			18, 519, 523, 525, 526,
C227	1-109-787-00	CAP, MICA 366PF 1% 100V			35, 536, 539, 540, 541
C225	1-109-793-00	CAP, MICA 256PF 1% 100V CAP, MICA 823PF 1% 100V			51, 553, 555, 557, 559
C229	1-109-796-00	CAL, MICA 0201 F 1/0 1004	561, 562,		69, 570, 571, 572
C46	1-123-332-00	CAP, ELECT 47 25V		1-161-055-00	CAP, CERAMIC 0.022 10% 50
			C9	1-161-897-31	CAP, CERAMIC 0.33 50V
			R265	1-214-084-00	RES, METAL 10 1% 1/4W
					*

Ref. No. Ref. No. or Q'ty Part No. Description or Q'ty Part No. (SG-67 BOARD, BVT-800PS/BKT-801 FOR PAL) (SG-67 BOARD, BVT-800PS/BKT-801 FOR PAL) R101, 368, 369 R211, 212, 215, 218, 219, 225. 1-214-096-00 RES, METAL 33 1% 1/4W 286, 288, 289, 304, 305, 307, 326, 328, 354, 355, 357, 359, R2, 4, 5, 7, 10, 209, 213, 367, 500, 504, 507, 515, 537, 216, 220, 223, 245, 251, 540, 548 255, 258, 260, 262, 501, 1-214-125-00 RES, METAL 510 1% 1/4W 572, 573, 598, 605, 606, 609 R259, 264, 279, 280, 290, 291, 1-214-100-00 **RES, METAL 47 1% 1/4W** 309, 310, 363, 364, 371, 535, 536, 624 R282, 313, 334, 361, 1-214-127-00 RES. METAL 620 1% 1/4W 512, 545 1-214-101-00 RES, METAL 51 1% 1/4W R100, 278, 284, 591 1-214-129-00 **RES, METAL 750 1% 1/4W** R102, 201, 204, 247, 269, 270, 612, 613 R519, 552 1-214-131-00 **RES, METAL 910 1% 1/4W** 1-214-105-00 **RES, METAL 75 1% 1/4W** R22, 23, 24, 32, 33, 46, 57, 73, R12, 16, 67, 240, 243, 267, 281, 77, 97, 208, 235, 238, 250, 283, 287, 306, 312, 314, 332, 256, 257, 345, 346, 516, 521, 333, 335, 336, 337, 338, 356, 549, 554, 588, 589, 595, 608 360, 362, 398, 510, 511, 514, 1-214-132-00 **RES, METAL 1K 1% 1/4W** 517, 520, 543, 544, 547, 550, 553, 611 R89, 297, 557 1-214-108-00 RES, METAL 100 1% 1/4W 1-214-134-00 **RES, METAL 1.2K 1% 1/4W** R25 1-214-111-00 **RES, METAL 130 1% 1/4W** R93, 99, 224, 246, 252, 268, 271, 319, 350, 502. R205, 322, 323, 577, 578, 582, 610, 617 619, 620 1-214-136-00 RES, METAL 1.5K 1% 1/4W 1-214-112-00 RES, METAL 150 1% 1/4W R3, 8, 11 1-214-138-00 RES, METAL 1.8K 1% 1/4W **R597** 1-214-115-00 RES, METAL 200 1% 1/4W R6, 27, 28 1-214-139-00 **RES, METAL 2.0K 1% 1/4W** R66, 233, 244, 327, 392, R35, 90, 92, 210, 214, 217, 221, 227, 228, 234, 393, 503 275, 276, 277, 303, 311, 315, 317, 318, 320, 1-214-116-00 **RES, METAL 220 1% 1/4W** 330, 331, 343, 353, 365, 366, 527, 533, 534, 559, 565, 566, 583, 594, 599, 616 R248 1-214-118-00 **RES, METAL 270 1% 1/4W** 1-214-140-00 **RES, METAL 2.2K 1% 1/4W** R229, 230, 253, 254, 266, R9 1-214-141-00 **RES, METAL 2.4K 1% 1/4W** 509, 513, 542, 546, 567, 568, 575, 592, 593, 600, R26, 37, 39, 524, 528, 601 529, 560, 561 1-214-119-00 RES, METAL 300 1% 1/4W 1-214-142-00 **RES, METAL 2.7K 1% 1/4W** R236, 370, 505, 538 R20, 21, 29, 51, 54, 60, 62, 64, 68, 69, 72, 86, 1-214-120-00 RES, METAL 330 1% 1/4W 104, 241, 294, 302, 321, 349, 352, 372, 373, 382, 388, 390, 400, 402, 508, 518, 526, 541, R261 1-214-121-00 RES, METAL 360 1% 1/4W 551, 581, 584, 586, 596, 618 R587 1-214-123-00 **RES, METAL 430 1% 1/4W** 1-214-144-00 RES, METAL 3.3K 1% 1/4W R43, 45, 52, 58, 88, 103, R98, 242 1-214-145-00 **RES, METAL 3.6K 1% 1/4W** 263, 386, 387 1-214-124-00 RES, METAL 470 1% 1/4W R325, 580, 622 1-214-146-00 **RES, METAL 3.9K 1% 1/4W** R525, 558 1-214-147-00 RES, METAL 4.3K 1% 1/4W

Ref. No.			Ref. No.		
or Q'ty	Part No.	Description	or Q'ty	Part No.	Description
(SG-67 BOA	RD RVT-ROOPS	/BKT-801 FOR PAL)	(SG-67 BOA	ARD BVT-800PS	/BKT-801 FOR PAL)
	237, 285, 292, 29		RV507	1-228-288-00	RES, VAR, METAL 100
	329, 339, 341, 35		RV200	1-228-289-00	RES, VAR, METAL 200
	523, 556, 570, 57		RV203	1-228-291-00	RES, VAR, METAL 1K
603, 604	323, 330, 370, 37	11, 574,	RV210, 50		1120, 1711, 1112 111
000, 004	1-214-148-00	RES, METAL 4.7K 1% 1/4W	117210, 00	1-228-292-00	RES, VAR, METAL 2K
R44, 48, 49	, 65, 84, 623		RV8, 202, 3	207, 504	
	1-214-149-00	RES, METAL 5.1K 1% 1/4W		1-228-293-00	RES, VAR, METAL 5K
R61	1-214-150-00	RES, METAL 5.6K 1% 1/4W	DV0 201 I	Ene ENO	
		RES, METAL 6.2K 1% 1/4W	RV9, 201, 9	1-228-294-00	DEC VAD METAL 10K
N390, 607	1-214-151-00	RES, METAL 6.2K 1% 1/4W		1-226-294-00	RES, VAR, METAL 10K
R78 226 2	39, 249, 295		RV6 7 200	6, 208, 209,	
1170, 220, 2	1-214-152-00	RES, METAL 6.8K 1% 1/4W	500, 50		
	1-214-152-00	1120, METAL 0.01. 170 1740	500, 50,	1-228-295-00	RES, VAR, METAL 20K
R42, 47	1-214-153-00	RES, METAL 7.5K 1% 1/4W		1-220-255-00	NEO, VAN, METAL 201
, 4,	1214 100 00		RV204 20	5 1-228-296-00	RES, VAR, METAL 50K
R207 324	380, 579, 621		114204, 20	3 1-220-250-00	1120, 4711, 1112172 0011
11207, 324,	1-214-154-00	RES, METAL 8.2K 1% 1/4W	RV1, 2, 3,	4 6	
	1-214-154-00	1120, METAE 0.21 170 1740	NV 1, 2, 3,	1-230-740-21	RES, VAR, CARBON 5K
R232	1-214-155-00	RES, METAL 9.1K 1% 1/4W		1-230-740-21	MES, VAN, CANDON SK
N232	1-214-155-00	NES, METAL 3.110 1/41	RB1, 2	1-231-450-00	RES BLOCK, 3.3KX8
B10 70 00	2 224 272 272		NO1, 2	1-231-430-00	nes secon, s.snac
	2, 231, 272, 273,		BB200 20:	1, 202, 500	
	301, 340, 342, 3! 383, 384, 385, 3!		110200, 20	1-231-504-00	RES BLOCK, 620X4
		09,		1-201-004-00	1120 020011, 020714
391, 522,	1-214-156-00	RES, METAL 10K 1% 1/4W	BP502	1-235-168-00	FILTER, BAND PASS, 4.43MHz
	1-214-150-00	RES, METAL TON 1% 1/411	BP200	1-235-199-00	FILTER, BAND PASS, 4.43MHz
R34, 50, 56	E0 202		BP500	1-235-200-00	FILTER, BAND PASS, 4.43MHz
no4, 50, 50	, 55, 293 1-214-160-00	RES, METAL 15K 1% 1/4W	BP501	1-235-201-00	FILTER, BAND PASS, 4.43MHz
	1-214-100-00	1120, METAE 131 1/411	BP202	1-235-202-00	FILTER, BAND PASS, 8.91MHz
R375, 614,	615				•
, 0, 014,	1-214-162-00	RES, METAL 18K 1% 1/4W	LP201	1-235-203-00	FILTER, LOW PASS
			LP200	1-235-204-00	FILTER, LOW PASS
R40, 74	1-214-163-00	RES. METAL 20K 1% 1/4W	LP202	1-235-205-00	FILTER, LOW PASS
R31, 296, 3	44. 374		CP200, 201	1, 202	
••	1-214-164-00	RES, METAL 22K 1% 1/4W		1-235-206-00	CR BLOCK
		·			
R53, 55, 85	, 585		BP201	1-235-207-00	FILTER, BAND PASS, 4.43MHz
	1-214-165-00	RES, METAL 24K 1% 1/4W	R81	1-247-895-00	RES, CARBON 470K 5% 1/6W
R79	1-214-166-00	RES, METAL 27K 1% 1/4W	R1, 13, 14,	. 15, 19 , 70, 71,	
			95 <i>,</i> 96		
R63, 83, 34	7, 379, 531, 563			1-247-903-00	RES, CARBON 1.0M 5% 1/6VV
	1-214-168-00	RES, METAL 33K 1% 1/4W			
			LV200	1-407-569-00	COIL, VAR, 10
R378	1-214-169-00	RES, METAL 36K 1% 1/4W	L6	1-407-923-00	INDUCTOR, MICRO 47 10%
R91	1-214-170-00	RES, METAL 39K 1% 1/4W	L215	1-408-401-00	INDUCTOR, MICRO 2.2 5%
	06, 377, 396,			214, 500, 501,	
5 30 , 562			503, 504	4 400 400 40	
	1-214-172-00	RES, METAL 47K 1% 1/4W		1-408-409-00	INDUCTOR, MICRO 10 5%
				4 400 445 45	1110110700 141000 00 00
R30, 38	1-214-173-00	RES, METAL 51K 1% 1/4W	L216	1-408-416-00	INDUCTOR, MICRO 39 5%
R87	1-214-175-00	RES, METAL 62K 1% 1/4W	,		
			L5, 201, 20		INDUCTOR MICES COS FO
	, 75, 80, 82, 348,	•		1-408-425-00	INDUCTOR, MICRO 220 5%
	506, 532, 539,				
564,602	4 044 405 55	PPO SEPTAL ADDIC 401 A 1011			
	1-214-180-00	RES, METAL 100K 1% 1/4W			

Ref. No.	Danie Nia	Description	Ref. No.		
or Q'ty	Part No.	Description	or Q 'ty	Part No.	Description
(SG-67 BOA		/BKT-801 FOR PAL)	(SG-67 BO		/BKT-801 FOR PAL)
,,	1-408-427-00	INDUCTOR, MICRO 330 5%	2200, 200,	8-719-100-27	DIODE RD4.7E-B2
L200	1-408-628-00	INDUCTOR 2.72	D8	8-719-101-98	DIODE 1SS97
L502, 505	1-408-635-00	INDUCTOR 12.40	D2, 505	8-719-139-07	DIODE 15597 DIODE RD3.9E
L209	1-408-637-00	INDUCTOR, 13.00	,	00000	2103E 1100.3E
L211	1-408-862-00	INDUCTOR 6.18	D204, 208,	209, 210, 503, 50	04
L207	1-408-868-00	INDUCTOR 15.30	,	8-719-162-07	DIODE RD6.2E
L208	1-408-869-00	INDUCTOR 15.70	D1, 3, 4, 5,	6, 7, 9, 10, 200,	
L210	1-408-873-00	INDUCTOR 74.10	201, 203,	500, 501, 502	
EQ200	1-415-299-00	DELAY LINE, 250 ns		8-719-815-55	DIODE 1\$1555
EQ500	1-415-300-00	DELAY LINE, 320 ns			
L1, 2, 3, 4	1-421-329-00	COIL, CHOKE	Q 7	8-729-023-69	TRANSISTOR 2N2369A
S5, 6	1-516-925-21	SWITCH, DIP, 8-CKT	0011 010	TOO FOA E40 F4	
•	1-527-357-00	FILTER, CERAMIC, 5.36MHz	U211, 212,	503, 504, 510, 51	
X1, 4, 200	1-527-585-00	VCO, CRYSTAL, 17.734475MHz		8-729-110-53	TRANSISTOR 2SA1005
X3	1-527-729-00	VCO, CRYSTAL, 14.187500MHz	Q209, 213,	EOE.	
		7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Q205, 215,	8-729-117-54	TRANSISTOR 2SA1175
FB1, 2, 3, 4,	200, 201, 202,			0.20 11, 54	MANGIOTON 23A1173
203, 500,	501, 502, 503,		Q200, 204.	205, 206, 207,	
504, 505			500, 501,		
	1-535-178-00	FERRITE BEAD		8-729-606-32	TRANSISTOR 2SC2603
S7, 200, 500				208, 210, 214,	
	1-552-509-00	SWITCH, DIP, 1-CKT	215, 506,	507, 508, 509	
S2	4 554 000 00	CHUTOU TOOOLE		8-72 9-6 72-43	TRANSISTOR 2SC2724
S1, 3	1-554-009-00 1-554-010-00	SWITCH, TOGGLE SWITCH, TOGGLE	1015 40	0.740.000.54	
5 PCS	1-560-733-00	PIN, SHORT	IC1F, 4G	8-749-936-51	IC BX365A
3.00	1-300-733-00	riie, Shori	IC2C, 3E, 9	E	
2 PCS	1-561-832-00	SOCKET, SHORT	1020, 32, 3	8-749-938-10	IC BX381
CF202, 203	1-567-066-00	FILTER, CERAMIC, 5.79MHz		0.40.000.10	10 0/301
X2	1-567-067-00	CRYSTAL, 17.734475MHz	IC10Q, 10X	8-757-731-00	IC CX773A
X500	1-567-071-00	VCO, CRYSTAL, 11.5860MHz	IC10J	8-757-903-00	IC CX7903
X501	1-567-072-00	VCO, CRYSTAL, 12.2970MHz			
S4	1-570-281-11	SWITCH, DIP	IC11 1D 1	W, 2H, 2R, 2U,	
TH200	1-806-335-00	THERMISTOR, TMD1410H		IK, 4W, 5G, 5K	
5 PCS	2-282-313-11	KNOB, CONTROL	22, 310, -	8-759-000-05	IC MC1496G; MOTOROLA
TD1 0 0 4		44 40 40		0-755-000-05	IC MC1430G, MOTOROLA
	5,6,7,8,9,10,		IC4Z	8-759-001-16	IC MC10116L
	00, 201, 202, 203 208, 209, 210, 2			 • • • •	
	503, 504, 505, 5		IC3N	8-759-016-48	IC MC1648P
	200, 201, 202, 20		IC4S	8-759-100-71	IC UPC71A
501,502	,,,	,	IC1R	8-759-145-57	IC UPC4557C
	3-657-235-00	TERMINAL, TP	IC3X	8-759-145-58	IC UPC4558C
			IC10V	8-759-240-12	IC TC4012BP, CMOS
2 PCS	3-673-249-00	LEVER, PC BOARD	101011	0.750.640.45	10
5 PCS	7-621-737-08	SETSCREW, HEX. 2.6X3	IC10U	8-759-240-40	IC TC4040BP, CMOS
6 PCS	7-621-912-20	SCREW, B 2.6X5	IC2Y	8-759-301-02	IC HD10102
12 PCS	7-621-981-15	SCREW, PSW 2.6X6	IC2F 2X 3	G, 3M, 4M, 4X	
2 PCS	7-626-320-11	PIN, SPRING 3X8	, 27, 3	8-759-301-31	IC HD10131
D202	9.712 540 06	DIODE 1725 //1		2.22.00101	
JEV2	8-712-540-06	DIODE 1T25-41	IC6B	8-759-374-58	IC HA17458GS
			IC9W	8-759-618-41	IC M51841P
			IC5S, 5W, 6	E, 9N	
				8-759-900-00	IC SN74LS00N, TTL
			1000		
			IC3B, 5X, 6		IC SN74LS04N, TTL

Ref. No. or Q'ty Part No. Description (SG-67 BOARD, BVT-800PS/BKT-801 FOR PAL) IC5U 8-759-900-08 IC SN74LS08N, TTL IC2B, 3C, 7U 8-759-900-11 IC SN74LS11N, TTL IC4U, 7S, 8P 8-759-900-13 IC SN74LS113AN, TTL IC10G 8-759-900-20 IC SN74LS20N, TTL IC10M IC SN74LS30N, TTL 8-759-900-30 IC3R 8-759-900-59 IC H11-0201 IC5E, 6S, 7X, 8N, 9P 8-759-900-74 IC SN74LS74AN, TTL IC5Q, 10N 8-759-900-86 IC SN74LS86N, TTL IC6P, 7J, 8H, 10C 8-759-901-23 IC SN74LS123N, TTL IC5D, 7Q, 8J 8-759-901-63 IC SN74LS163AN, TTL IC1A, 3A, 4B, 5A, 8R, 8V, 10S 8-759-901-64 IC SN74LS164N, TTL IC6Q, 9U 8-759-901-75 IC SN74LS175N, TTL IC5Y, 10E 8-759-901-91 IC SN74LS191N, TTL IC6F, 6U, 6W, 6X, 7W, 7Y, 8Z, 9T, 10W 8-759-902-21 IC SN74LS221N, TTL D80I 8-759-903-65 IC SN74LS365AN, TTL IC5P, 9S, 10L 8-759-903-93 IC SN74LS393N, TTL IC3VV, 6D, 9L 8-759-906-01 IC TL601CP IC2S 8-759-906-07 IC TL607CP IC1C, 4D 8-759-907-60 IC UA760HC IC8K 8-759-910-51 IC SN74S51N, TTL IC5C 8-759-910-86 IC SN74S86N, TTL IC8U, 8Y IC SN74S133N, TTL 8-759-911-33 IC8L 8-759-911-75 IC SN74S175N, TTL IC1Z 8-759-930-54 IC CA3054 IC1B, 4C, 9J 8-759-942-21 IC SN74221N, TTL

IC10 F

IC10D

IC9K

IC7K

8-759-942-65

8-759-952-07

8-759-974-06

8-759-974-74

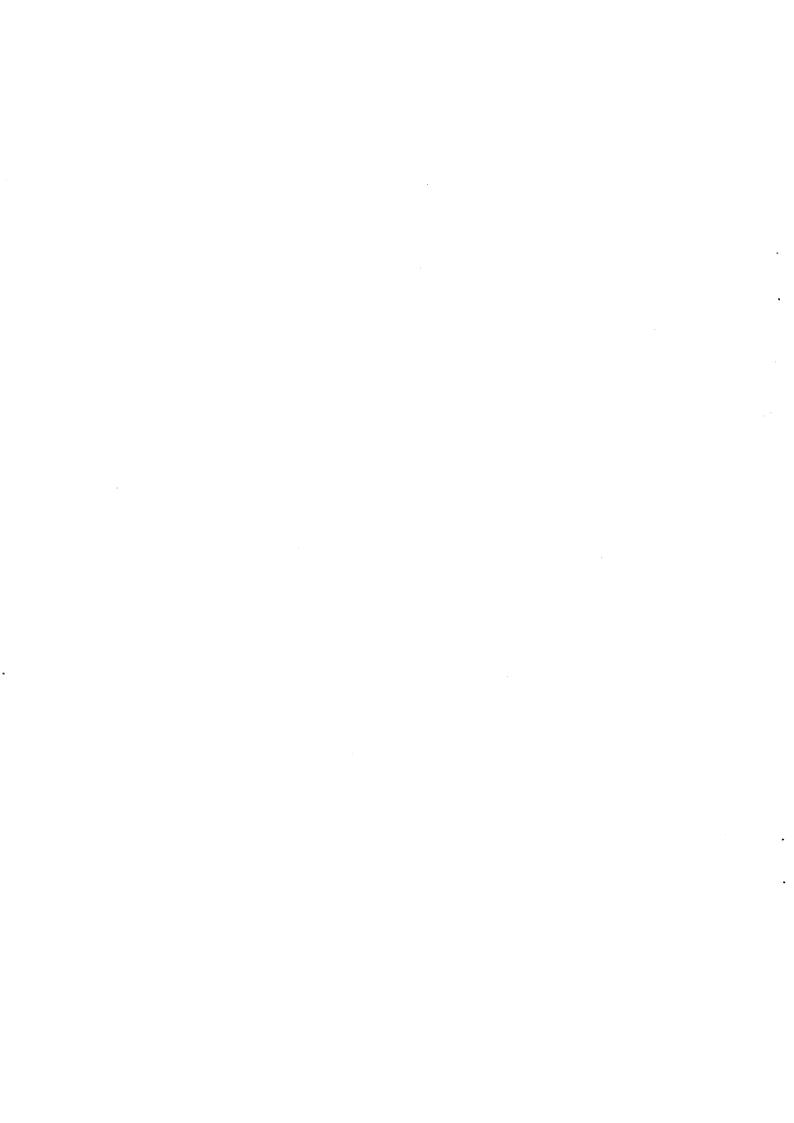
IC SN74265N, TTL

IC SN75207BN, TTL

IC SN7406N, TTL

IC SN7474N, TTL

Ref. No. or Q'ty Part No. Description (SG-67 BOARD, BVT-800PS/BKT-801 FOR PAL) IC1S, 3U, 4P, 7H, 9D, 10B, 10H 8-759-990-82 IC TL082CP IC2T, 4R 8-759-990-84 IC TL084CN Q201, 203, 216 8-761-622-00 **TRANSISTOR 2SC1636** Q1, 2, 5, 6 8-769-193-09 **TRANSISTOR 2SK43-3**



Ref. No. Ref. No. or Q'ty Part No. Description Part No. Description or Q'tv (SG-68 BOARD, BVT-800PS/BKT-802 FOR SECAM) (SG-68 BOARD, BVT-800PS/BKT-802 FOR SECAM) R4, 167, 168, 183, 185, 354 RES, METAL 130 1% 1/4W 1-214-111-00 1-214-139-00 RES, METAL 2.0K 1% 1/4W R128, 326, 328, 397, 399, R21, 77, 117, 120, 124, 130, 139, 140, 441, 442, 446 **RES, METAL 150 1% 1/4W** 141, 142, 158, 163, 164, 200, 201, 1-214-112-00 304, 308, 320, 374, 375, 377, 380, 391, 418, 419, 426, 427 R61, 105, 165, 166, 203, 204, 310, 1-214-140-00 **RES. METAL 2.2K 1% 1/4W** 312, 336, 382, 384, 407 **RES, METAL 220 1% 1/4W** 1-214-116-00 R9, 81 1-214-141-00 **RES, METAL 2.4K 1% 1/4W RES, METAL 270 1% 1/4W** R436 1-214-118-00 R27, 156, 361, 362, 367, 369 R145, 149, 150, 152, 160, **RES, METAL 2.7K 1% 1/4W** 1-214-142-00 302, 434 **RES, METAL 300 1% 1/4W** 1-214-119-00 R50 1.214.143-00 RES. METAL 3K 1% 1/4W R172, 305, 376, 431, 448 R19, 47, 59, 63, 65, 67, 69, 70, 90, 1-214-120-00 **RES, METAL 330 1% 1/4W** 72, 73, 80, 129, 173, 175, **RES, METAL 430 1% 1/4W** R122 1-214-123-00 209, 210, 217, 218, 219, 230, R40, 49, 54, 71, 231, 234, 331, 402, 438, 503 343, 344, 413, 414 1-214-124-00 **RES, METAL 470 1% 1/4W** 1-214-144-00 RES. METAL 3.3K 1% 1/4W R85, 327, 398, 433, 443 R114, 115, 118, 121, 134, 1-214-145-00 **RES, METAL 3.6K 1% 1/4W** 136, 300, 430, 432 1-214-125-00 **RES, METAL 510 1% 1/4W** R157, 306, 324, 378, 395, 450 R39, 143, 154 1-214-146-00 **RES, METAL 3.9K 1% 1/4W** 1-214-126-00 RES, METAL 560 1% 1/4W R108, 174, 205, 206, 208, R137, 138, 144, 148, 151 RES, METAL 620 1% 1/4W 445, 501 1-214-127-00 1-214-148-00 **RES, METAL 4.7K 1% 1/4W** R329, 401, 439 R23, 60, 322, 393, 437 RES, METAL 680 1% 1/4W 1-214-128-00 1-214-149-00 RES. METAL 5.1K 1% 1/4W RES. METAL 750 1% 1/4W **R87** 1-214-129-00 RES, METAL 5.6K 1% 1/4W R62 1-214-150-00 **RES. METAL 820 1% 1/4W** 1-214-130-00 **R78** R334, 342, 405, 412 R22, 24, 25, 28, 32, 34, 35, 36, 41, 42, 1-214-152-00 **RES, METAL 6.8K 1% 1/4W** 43, 44, 46, 56, 57, 84, 107, 109, 153, 161, 187, 188, 191, 192, 313, 315, **RES, METAL 7.5K 1% 1/4W** R341 1-214-153-00 317, 318, 321, 323, 337, 339, 340, 346, 347, 355, 365, 370, 371, 372, R325, 396, 411, 447 373, 386, 388, 389, 392, 394, 408, 1-214-154-00 **RES. METAL 8.2K 1% 1/4W** 409, 410, 416, 417, 444, 449, 458 1-214-132-00 RES, METAL 1K 1% 1/4W R18, 126, 169, 170, 171, 180, 182, 202, 211, 345, 348, 360, 364, 415 1-214-156-00 RES, METAL 10K 1% 1/4W R58, 86, 155, 303, 309, 330, 332, 349, 363, 381, 400, 403, 440 R55, 199, 214, 335, 406, 422, 425 RES, METAL 12K 1% 1/4W 1-214-136-00 RES, METAL 1.5K 1% 1/4W 1-214-158-00 R53, 74, 184, 186, 333, 404 R7, 8, 11, 113, 135 1-214-160-00 **RES. METAL 15K 1% 1/4W** 1-214-138-00 RES, METAL 1.8K 1% 1/4W R195 **RES, METAL 18K 1% 1/4W** 1-214-162-00

Ref. No. Ref. No. or Q'ty Part No. Description or Q'ty Part No. Description SG-68 BOARD (BVT-800PS/BKT-802) FOR SECAM (SG-68 BOARD, BVT-800PS/BKT-802 FOR SECAM) 1-130-489-00 CAP, MYLAR 0.033 5% 50V C59 COMPLETE PCB, SG-68 C33, 38, 46 1-130-495-00 **CAP, MYLAR 0.1 5% 50V** When the SG-68 complete circuit board is necessary, C339, 388, 390, 391 order a BKT-802. 1-131-342-00 CAP, TANT 0.15 10% 35V (This assembly includes the following parts.) C305, 306, 380, 389 **CAP, CERAMIC 100PF 10% 50V** 1-102-106-00 C332 CAP, TANT 1.0 10% 35V 1-131-347-00 C50, 136 1-102-114-00 **CAP, CERAMIC 470PF 10% 50V** C30, 154 1-131-355-00 CAP, TANT 2.2 10% 25V C131, 132, 333, 337 CAP, TANT 10 10% 25V C39, 47 1-131-359-00 1-107-075-00 **CAP, MICA 39PF 5% 50V** C322, 345, 347, 370 **CAP, MICA 47PF 5% 50V** C126 1-107-077-00 1-131-371-00 CAP, TANT 10 10% 16V C15, 119 1-107-081-00 **CAP, MICA 68PF 5% 50V** C102, 118, 130, 307, 308, C57, 140, 142, 143, 145, 149, 314, 315, 318, 336, 338, 150, 152, 353, 357, 371 340, 374, 378, 379, 386, 393 1-107-085-00 **CAP, MICA 100PF 5% 50V** 1-131-373-00 **CAP, TANT 22 10% 16V** C144, 320, 376 C100 1-131-374-00 **CAP, TANT 33 10% 16V** 1-107-087-00 **CAP, MICA 120PF 5% 50V** 1-141-240-00 CAP, TRIMMER 20PF CV100 **CAP, MICA 27PF 5% 500V** C402 1-107-157-00 1-161-039-00 CAP, CERAMIC 0.001 10% 50V C49 C14 1-107-206-00 CAP, MICA 15PF 5% 500V C31, 128 **CAP. MICA 20PF 5% 500V** 1-107-209-00 C1, 3, 4, 6, 7, 9, 10, 12, 17, 20, 22, 23, 25, 26, 27, 32, 34, 37, 41, 42, 43, 44, 45, 48, C133, 134, 382 51, 52, 54, 60, 62, 64, 68, 70, 71, 101, 1-109-539-00 CAP, MICA 150PF 5% 100V 103, 104, 105, 106, 108, 109, 111, 112, 113, 114, 115, 117, 121, 122, 123, 124, CAP, MICA 200PF 5% 100V C356 1-109-541-00 125, 127, 129, 137, 138, 139, 141, 151, CAP, MICA 330PF 5% 100V C1 10 1-109-547-00 300, 302, 303, 309, 311, 312, 316, 317, C56, 355 1-109-549-00 CAP, MICA 390PF 5% 100V 323, 325, 326, 327, 330, 335, 341, 342, **CAP, MICA 470PF 5% 100V** 1-109-553-00 C55 343, 344, 348, 350, 351, 352, 359, 360, 361, 362, 364, 366, 367, 369, 372, 375, C69, 120, 358 377, 383, 384, 385, 392, 394, 400, 401 CAP, ELECT 47 25V 1-123-332-00 CAP, CERAMIC 0.022 10% 50V 1-161-055-00 C324, 349 1-123-341-00 CAP, ELECT 10 35V C13, 35 1-161-897-31 CAP, CERAMIC 0.33 R366, 368 1-208-252-00 RES, MICRO 50M C16, 21, 53, 58, 63, 65, 66, 107, 116, 301, 310, 334, R351, 352, 353, 357, 358, 359 365, 387 1-214-090-00 RES, METAL 18 1% 1/4W 1-123-342-00 CAP, ELECT 22 35V R2, 3, 5, 6, 10, 104, 106, 116, C2, 5, 8, 11 1-123-344-00 CAP, ELECT 47 35V 119, 123, 127, 131, 146, 147, 159, 301, 307, 316, 319, 379, C29, 61, 67, 146, 147, 387, 390, 428, 429, 435 148, 319, 321, 346, 373 1-214-100-00 **RES, METAL 47 1% 1/4W** CAP, MYLAR 0.001 5% 50V 1-130-471-00 R110, 176 1-214-101-00 **RES, METAL 51 1% 1/4W** C40 1-130-472-00 CAP, MYLAR 0.0012 5% 50V R89, 102, 103, 125, 132, CAP, MYLAR 0.0022 5% 50V C28, 36, 153 1-130-475-00 162, 194, 454, 455 1-214-105-00 **RES, METAL 75 1% 1/4W** CAP, MYLAR 0.0047 5% 50V C329, 331 1-130-479-00 **RES, METAL 82 1% 1/4W** R233 1-214-106-00 C18, 24, 304, 313, 328, 381 1-130-483-00 CAP, MYLAR 0.01 5% 50V R12, 16, 38, 66, 88, 111, 112, 177, 178 CAP, MYLAR 0.022 5% 50V C19, 135 1-130-487-00 1-214-108-00 **RES, METAL 100 1% 1/4W**

Ref. No.			Ref. No.		
or Q'ty	Part No.	Description	or Q'ty	Part No.	Description
(SC 60 BO)	V BU BYT-800PS	/BKT-802 FOR SECAM)	(SG-68 BO)	ARD RVT.ROOPS	S/BKT-802 FOR SECAM)
	•	RES, METAL 20K 1% 1/4W	R314, 338,		S/BK 1-802 FOR SECAMI
	1 214 100 00		,,	1-247-887-00	RES, CARBON 220K 5% 1/6W
	5, 52, 76, 215,				
350		DEC 145741 00K 4W 4/4W	R1, 13, 14,	15, 20, 68, 83	
	1-214-164-00	RES, METAL 22K 1% 1/4W		1-247-903-00	RES, CARBON 1.0M 5% 1/6W
R51	1-214-165-00	RES. METAL 24K 1% 1/4W	LV100	1-407-567-00	COIL, VAR, 4.7
			LV300	1-407-569-00	COIL, VAR, 10
R198, 356,	423		L6	1-408-020-00	INDUCTOR, MICRO 68 10%
	1-214-166-00	RES, METAL 27K 1% 1/4W			
D106 420	1-214-167-00	RES, METAL 30K 1% 1/4W		102, 300, 301,	
N 150, 420	1-214-107-00	NES, WE FAL SUR 1/6 1/4W	304, 305,	306, 307 1-408-409-00	INDUCTOR, MICRO 10 5%
R48, 64, 75	5, 189, 190, 424			1-400-403-00	INDUCTOR, MICHO 10 5%
	1-214-168-00	RES, METAL 33K 1% 1/4W	L302, 303	1-408-421-00	INDUCTOR, MICRO 100 5%
			L103, 104	1-408-423-00	INDUCTOR, MICRO 150 5%
R197	1-214-169-00	RES, METAL 36K 1% 1/4W	L5	1-408-425-00	INDUCTOR, MICRO 220 5%
R212	1-214-170-00	RES, METAL 39K 1% 1/4W		1-421-329-00	COIL, CHOKE
R79, 82, 10	01. 213		S3, 4	1-516-925-21	SWITCH, DIP, 8-CKT
, 0, 02, 10	1-214-172-00	RES, METAL 47K 1% 1/4W	CF1	1-527-497-00	FILTER, CERAMIC, 4.55MHz
			X100	1-527-512-00	CRYSTAL, 5.244141MHz
R29	1-214-173-00	RES, METAL 51K 1% 1/4W	X1	1-527-729-00	VCO, CRYSTAL, 14.187500MHz
R37	1-214-176-00	RES, METAL 68K 1% 1/4W	504 0 0 4		
R17. 31. 10	00, 193, 216, 311	,	FB1, 2, 3, 1	100, 300, 301 1-535-178-00	FERRITE BEAD
383, 457	. ,			1-555-176-00	rennise beau
	1-214-180-00	RES, METAL 100K 1% 1/4W	S5, 100	1-552-509-00	SWITCH, DIP, 1-CKT
DV404 40	2 240		S1, 2	1-554-010-00	SWITCH, TOGGLE
RV101, 10	2, 310 1-228-289-00	RES, VAR, METAL 200	12 2 4 40	4 204 205	
		,,	J2, 3, 4, 10	4, 304, 305 1-560-733-00	PIN, SHORT
RV303	1-228-291-00	RES, VAR, METAL 1K			,
			J2, 3, 4, 10	4, 304, 305	
RV3, 300,	304, 305 1-228-292-00	RES, VAR, METAL 2K		1-561-832-00	SOCKET, SHORT
	1-220-252-00	HEO, VAII, METAE EN	2 PCS	2-282-313-11	KNOB, CONTROL
RV4	1-228-293-00	RES, VAR, METAL 5K	2.00		
_				, 5, 6, 7, 8, 9, 10	
RV5, 103,	104, 302, 307, 31			2, 103, 104, 105,	
	1-228-294-00	RES, VAR, METAL 10K	300, 301	, 302, 303, 304, 1 309	305, 306,
RV6, 100,	105, 106, 107, 10	08,		,, 50 <i>9</i> 100, 101, 102, 3	00, 301,
301, 30	6, 308, 312, 313		302,303	. , , -	
	1-228-295-00	RES, VAR, METAL 20K		3-657-235-00	TERMINAL, TP
RV1,2	1-230-740-21	RES, VAR, CARBON 5K	2 PCS	3-673-249-00	LEVER, PC BOARD
RB1, 2	1-231-450-00	RES BLOCK, 3.3KX8	2 PCS	7-621-737-08	SETSCREW, HEX. 2.6X3
BP200	1-231-468-00	FILTER, BANDPASS, 4.28MHz	6 PCS	7-621-912-20	SCREW, B 2.6X5
BP300	1-231-469-00	FILTER, BANDPASS, 4.3MHz	12 PCS	7-621-981-15	SCREW, PSW 2.6X6
BP201	1-231-472-00	FILTER, BANDPASS, 4.43MHz	2 PCS	7-626-320-11	PIN, SPRING 3X8
LP200	1-231-477-00	FILTER, LOW PASS	D105	8-719-100-27	DIODE RD4.7E-B2
			D103	8-719-100-27	DIODE 1SS97
RB100, 10	1, 102, 103,				
3 00, 3 0	1, 302, 303	DES DI CON 000%	D2, 301, 30		
	1-231-504-00	RES BLOCK, 620X4		8-719-139-07	DIODE RD3.9E
CP200	1-235-206-00	CR BLOCK			

Ref. No.			Ref. No.		
or Q'ty	Part No.	Description	or Q'ty	Part No.	Description
100 60 DO	A D.D. D. /T 00000	VOKT 000 FOR OFOAN)	(
	8-719-151-07	S/BKT-802 FOR SECAM) DIODE RD5.1E-B			(/BKT-802 FOR SECAM)
D300, 302	8-719-191-07	DIODE RD9.1E-B	IC6F	8-759-900-10	IC SN74LS10N, TTL
D 100	0-7 13-13 1-07	DIODE ADS. IE	IC6C	8-759-900-11	IC SN74LS11N, TTL
D1 2 4 E	6 7 0 0 11 10		IC6L, 7T	8-759-900-13	IC SN74LS113AN, TTL
	6, 7, 8, 9, 11, 12	•	IC6E	8-759-900-20	IC SN74LS20N, TTL
101, 102,		D. 605 404 FF	IC7F	8-759-900-30	IC SN74LS30N, TTL
	8-719-815-55	DIODE 1S1555			
			IC5Q, 6R, 8	3Q, 8T, 9D	
Q7	8-729-023-69	TRANSISTOR 2N2369A		8-759-900-74	IC SN74LS74AN, TTL
0440 000					
Q110, 305,	307, 308, 314, 3		IC5P, 7H	8-759-900-86	IC SN74LS86N, TTL
	8-729-117-54	TRANSISTOR 2SA1175			
			IC6P, 8E, 9	J	
	109, 111, 300,			8-759-901-23	IC SN74LS123N, TTL
301, 302,	306, 310, 311, 3	21			
	8-729-606-32	TRANSISTOR 2SC2603	IC6M, 7R	8-759-901-63	IC SN74LS163AN, TTL
			IC6G, 6H, 7	M. 7S. 8M	
Q3, 4, 102,	105, 107, 108, 3	03,	,, .	8-759-901-64	IC SN74LS164N, TTL
304, 309,	312, 313, 315, 3	16,		0.00.00.04	10 011,42310414, 112
319, 320			IC6N, 7L	8-759-901-75	IC CAIZAL CAZEAL TTI
	8-729-672-43	TRANSISTOR 2SC2724	ICON, /L	0-753-301-75	IC SN74LS175N, TTL
			ICAS AT E	S, 5T, 6A, 6B,	
IC5B	8-749-936-51	IC BX365A			
IC7J, 9R	8-757-731-00	IC CX773A, C-MOS	6J, 6S, 91	=	
IC8G	8-757-903-00	IC CX7903, C-MOS		8-759- 9 02-21	IC SN74LS221N, TTL
1000	0-757-303-00	IC CX7503, C-MO3			
IC1E, 1R, 2	D 3E EC		IC7K	8-759-903-65	IC SN74LS365AN, TTL
1012, 111, 2	8-759-000-05	IC MC1496G; MOTOROLA	IC6Q, 7G	8-759-903-93	IC SN74LS393N, TTL
	6-755-000-05	IC WIC 1496G; WIO TOROLA			
1014 10 1	20.50		IC1H, 3H, 4	N	
IC1A, 1Q, 3		10.110404461 FOL		8-759-905-77	IC HI1-200-5, C-MOS
	8-759-001-16	IC MC10116L, ECL			
			IC1M, 9F	8-759-906-01	IC TL601CP, P-MOS
IC3N	8-759-001-98	IC MC10198L	IC9E	8-759-906-69	IC SN74LS669N, TTL
IC1P, 7E	8-759-103-19	IC UPC319C			
IC2Q	8-759-145-57	IC UPC4557C	1C7P, 8P	8-759-911-33	IC SN74S133N, TTL
IC9L	8-759-240-12	IC TC4012BP, C-MOS	IC8F	8-759-942-21	IC SN74221N, TTL
IC8L	8-759-240-40	IC TC4040BP, C-MOS	IC9C	8-759-942-65	IC SN74265N, TTL
			IC8B	8-759-952-07	IC SN75207BN, TTL
IC3P, 3Q, 5	F				
	8-759-301-02	IC HD10102, ECL	IC5H, 8H	8-759-974-06	IC SN7406N, TTL
			•	-	·/ · · · =
IC4A	8-759-301-07	IC HD10107, ECL	IC1N, 4J, 80	C	
IC1C, 3C	8-759-608-52	IC CX852	• •	8-759-990-82	IC TL082CP
IC4G	8-759-608-54	IC CX854			
IC4H	8-759-608-55	IC CX855	IC1G, 3G, 4	P 5.1 9R	
IC9P	8-759-618-41	IC M51841P	.0.0,00,	8-759-990-84	IC TL084CN
				0-733-330-64	IC I LUBACIN
IC301	8-759-700-14	IC NJM78M09A	0101 103	8-761-622-00	TRANSISTOR 2SC1636
				8-769-193-09	TRANSISTOR 2SK43-3
IC5M, 5R, 6	5D. 9K		41, 2, 5, 0	0-703-133-03	1 HANSIST ON 25K43-3
,,,	8-759-900-00	IC SN74LS00N, TTL			
	3	commence i i L			
IC5L, 6T, 8	K 8S				
	8-759-900-04	IC SN74LS04N, TTL			
	J-7 J3-300-04	IC SIV/4E304IV, I I E			
IC4Q, 4R, 5	N 70				
.074, 4K,	•	IC CN741 COON TT			
	8-759-900-08	IC SN74LS08N, TTL			

Ref. No.			Ref. No.	_	_
or Q'ty	Part No.	Description	or Q'ty	Part No.	Description
DD 40 D	OARD (BVT	1900BC)	(00.40.00		
rn-40 b	UAND (BV)	-800FS)		ARD, BVT-800PS	
4 50	4 0057 444 4	COMPLETE DOD DO 40	C557	1-109-780-00	CAP, MICA 660PF 1% 100V
1 PC		COMPLETE PCB, PR-40	C559	1-109-784-00	CAP, MICA 1408PF 1% 100V
(This assemi	bly includes the f	following parts.)	C521	1-109-786-00	CAP, MICA 63PF 1% 100V
			C133	1-109-787-00	CAP, MICA 66PF 1% 100V
C507	1-107-026-00	CAP, MICA 5.1PF +/-0.5PF 500V	C522	1-10 9 -788-00	CAP, MICA 70PF 1% 100V
C121, 611	1-107-048-00	CAP, MICA 6.8PF +/-0.5PF 500V			
C514	1-107-077-00	CAP, MICA 47PF 5% 50V	C523	1-109-789-00	CAP, MICA 82PF 1% 100V
C614	1-107-202-00	CAP, MICA 10PF 5% 500V	C525	1-109-790-00	CAP, MICA 90PF 1% 100V
			C528	1-109-791-00	CAP, MICA 150PF 1% 100V
C201, 218,	233, 240, 548, 5	66, 567,	C526	1-109-792-00	CAP, MICA 199PF 1% 100V
568, 569,	570, 571, 572, 5°	73, 574,	C131	1-109-793-00	CAP, MICA 256PF 1% 100V
590, 591,	592, 593, 594, 59	95, 596,			
597, 604			C524	1-109-794-00	CAP, MICA 275PF 1% 100V
	1-107-211-00	CAP, MICA 24PF 5% 500V	C137	1-109-795-00	CAP, MICA 445PF 1% 100V
			C520	1-109-797-00	CAP, MICA 900PF 1% 100V
C231, 581	1-109-527-00	CAP, MICA 47PF 5% 100V	C135	1-109-798-00	CAP, MICA 1223PF 1% 100V
C204	1-109-530-00	CAP, MICA 62PF 5% 100V	C124	1-123-307-00	CAP, ELECT 100 10V
C156, 165	1-109-531-00	CAP, MICA 68PF 5% 100V			. ,
C194, 517	1-109-532-00	CAP, MICA 75PF 5% 100V	C114, 115	1-123-330-00	CAP, ELECT 22 25V
C146, 160	1-109-535-00	CAP, MICA 100PF 5% 100V	· -	1-123-332-00	CAP, ELECT 47 25V
		·	C117, 123		CAP, ELECT 10 35V
C234, 516,	537, 612				,
•	1-109-537-00	CAP, MICA 120PF 5% 100V	C5, 6, 178,	179, 187, 198, 19	19 .
		·		227, 230, 239, 24	•
C1 16	1-109-540-00	CAP, MICA 180PF 5% 100V		530, 540, 541, 56	•
C150, 609	1-109-547-00	CAP, MICA 330PF 5% 100V	577, 599,		•
C162	1-109-553-00	CAP, MICA 470PF 5% 100V	• • • • •	1-123-343-00	CAP, ELECT 33 35V
C143	1-109-554-00	CAP, MICA 510PF 5% 100V		200.00	OAI, EEEO 1 00 00 1
C550	1-109-745-00	CAP, MICA 17PF +/-0.5PF 100V	C1. 2. 3. 4	1-123-345-00	CAP, ELECT 100 35V
			01,2,0,		J , 1220 . 103 451
C527	1-109-746-00	CAP, MICA 25PF +/-0.5PF 100V	C120, 190.	248, 576, 613	
C128	1-109-747-00	CAP, MICA 23PF +/-0.5PF 100V	,	1-130-471-00	CAP, MYLAR 0.001 5% 50V
C138	1-109-748-00	CAP, MICA 21PF +/-0.5PF 100V			2,
C563	1-109-751-00	CAP, MICA 55PF 1% 100V	C235, 536,	584	
C555	1-109-754-00	CAP, MICA 65PF 1% 100V	,	1-130-475-00	CAP, MYLAR 0.0022 5% 50V
		•			
C553	1-109-755-00	CAP, MICA 74PF 1% 100V	C154	1-130-479-00	CAP, MYLAR 0.0047 5% 50V
C132	1-109-756-00	CAP, MICA 76PF 1% 100V			
C140, 142	1-109-757-00	CAP, MICA 79PF 1% 100V	C118, 119,	144, 145, 152, 17	75
C130, 561	1-109-758-00	CAP, MICA 83PF 1% 100V		1-130-483-00	CAP, MYLAR 0.01 5% 50V
C136, 560	1-109-761-00	CAP, MICA 92PF 1% 100V			
•		•	C153, 176,	513, 556	
C558	1-109-762-00	CAP, MICA 104PF 1% 100V	,,	1-130-487-00	CAP, MYLAR 0.022 5% 50V
C549	1-109-764-00	CAP, MICA 122PF 1% 100V			
C127	1-109-768-00	CAP, MICA 139PF 1% 100V	C147	1-131-345-00	CAP, TANT 0.47 10% 35V
C141	1-109-769-00	CAP, MICA 166PF 1% 100V			. ,
C129	1-109-770-00	CAP, MICA 185PF 1% 100V	C155, 191	510, 511, 534,	
		· · · · · · · · · · · · · · · · · · ·	535, 579,		
C134	1-109-771-00	CAP, MICA 85PF 1% 100V	223, 0.0,	1-131-349-00	CAP, TANT 2.2 10% 35V
C554	1-109-772-00	CAP, MICA 283PF 1% 100V			5.11,
C552	1-109-773-00	CAP, MICA 314PF 1% 100V	C228, 229,	252 253	
C139	1-109-774-00	CAP, MICA 359PF 1% 100V	J220, 220,	1-131-351-00	CAP, TANT 4.7 10% 35V
C5 6 2	1-109-779-00	CAP, MICA 480PF 1% 100V			Jan, 1811 47 1070 007
		, 170 TOO T			

Ref. No.			Ref. No.					
or Q'ty	Part No.	Description	or Q'ty	· Part No.	Description			
	ARD, BVT-800PS	;)		ARD, BVT-800PS	}			
C173, 174,	•		R131, 240,	, 542				
	1-131-359-00	CAP, TANT 10 10% 25V		1-214-108-00	RES, METAL	100	1%	1/4W
C171, 172,			R101	1-214-109-00	RES, METAL	110	1%	1/4W
	1-131-373-00	CAP, TANT 22 10% 16V						
			R247, 252,					
C110, 125	1-131-374-00	CAP, TANT 33 10% 16V	560, 561,					
				1-214-110-00	RES, METAL	120	1%	1/4W
	, 11, 12, 101, 10							
	107, 108, 109, 1°		R260, 586,					
	157, 158, 159, 10			1-214-112-00	RES, METAL	150	1%	1/4W
	169, 170, 177, 1							
	185, 186, 192, 19		R600	1-214-113-00	RES, METAL	160	1%	1/4W
	202, 203, 205, 20							
	211, 212, 213, 2 ⁻		R108, 582,					
	222, 223, 224, 2			1-214-114-00	RES, METAL	180	1%	1/4W
	242, 244, 245, 24							
	503, 504, 505, 50			159, 161, 163, 18	•			
	518, 519, 531, 5		189, 217,	241, 284, 530, 5				
	543, 544, 545, 54			1-214-116-00	RES, METAL	220	1%	1/4W
	578, 582, 583, 5 <u>1</u>							
	598, 600, 601, 60	02, 603, 605,	R512	1-214-117-00	RES, METAL	240	1%	1/4W
606, 607,								
	1-161-055-00	CAP, CERAMIC 0.022 10% 50V	R193, 198,	•				
0540				1-214-118-00	RES, METAL	270	1% '	1/4W
C513	1-161-894-00	CAP, CERAMIC 0.1 50V						
				142, 205, 207,				
R273	1-214-084-00	RES, METAL 10 1% 1/4W	519, 539,					
R264, 276	1-214-086-00	RES, METAL 12 1% 1/4W		1-214-119-00	RES, METAL	300	1%	1/4W
0007 000	044 055 007 0		5040					
N&Z/, ZZ0,	244, 255, 267, 2		R646	1-214-120-00	RES, METAL	330	1% 1	1/4W
	1-214-088-00	RES, METAL 15 1% 1/4W	D440 400	100 547 500				
R199, 236	1 214 000 00	DEC META: 10 19/ 1/4M		180, 517, 536,				
R271	1-214-090-00 1-214-092-00	RES, METAL 18 1% 1/4W	609, 623	1 014 404 00	250 44574		-0/ -	
R607. 608	1-214-095-00	RES, METAL 22 1% 1/4W		1-214-121-00	RES, METAL	360	1%	1/444
R249, 259	1-214-096-00	RES, METAL 30 1% 1/4W RES, METAL 33 1% 1/4W	DE01 671	670				
11245, 255	1-214-050-00	NES, METAL 33 1% 1/417	R591, 671,	1-214-122-00	DEC METAL	200	40/	1 / 418 /
R144, 253,	261			1-214-122-00	RES, METAL	390	176	1/444
11144, 200,	1-214-097-00	RES, METAL 36 1% 1/4W	R175	1-214-123-00	RES, METAL	420	10/	I /AW
	1-214-057-00	1120, 1112 1741		1214 125-00	HEO, METAL	430	1.70	1/400
R102 115	117, 136, 187, 1	90	R111 245	246, 248, 254,				
-	208, 213, 214, 2	•	256, 258	240, 240, 204,				
	538, 570, 650	50 ,	200, 200	1-214-124-00	RES, METAL	470	1% 1	I /AW
, • 14,	1-214-100-00	RES, METAL 47 1% 1/4W		27-00	ALO, METAL	7,0	. 70	.,-,-
	1214 100 00	1120, 1112 47 170 17411	R182, 526	1-214-125-00	RES, METAL	510	1% 1	I /AW
R170, 171	1-214-101-00	RES, METAL 51 1% 1/4W	, 020		HEO, METAL	J 10	. 70	.,
	121410100	1120, 1112 17 17 17 17	R197, 235,	644				
R104, 113	118, 137, 194, 2	31 <i>2</i> 63	, 200,	1-214-126-00	RES, METAL	560	1% 1	/AW
	291, 292, 293, 2				1120, 1112172	500	170	,,400
	306, 307, 308, 3	• •	R103, 225,	503, 515				
	313, 501, 502, 5		, , , , , , , , , , , , , , , , , , , ,	1-214-127-00	RES, METAL	620	1% 1	/AW
-	563, 597, 604, 6	•			, I AL		. / 0	.,
,	1-214-105-00	RES, METAL 75 1% 1/4W	R185, 543,	564				
			,,	1-214-128-00	RES, METAL	680	1% 1	/ 4W
R126, 134,	141				,		0 1	,
, - 5-1,	1-214-106-00	RES, METAL 82 1% 1/4W	R123, 158,	511, 534				
		-,=	,,	1-214-129-00	RES, METAL	750	1% 1	/4W
R537, 680	1-214-107-00	RES, METAL 91 1% 1/4W			,		(.,
		, <u>-</u>						

Ref. No. Ref. No. or Q'ty Part No. Description or Q'ty Part No. Description (PR-40 BOARD, BVT-800PS) (PR-40 BOARD, BVT-800PS) R520 1-214-130-00 RES. METAL 820 1% 1/4W R196, 234, 288, 303, 506, 523, 567, 647, 676 1-214-147-00 **RES, METAL 4.3K 1% 1/4W** R203, 226, 314, 520 1-214-131-00 RES, METAL 910 1% 1/4W R120, 554, 565, 588, 594, 645 R127, 133, 143, 146, 152, 153, 1-214-148-00 **RES, METAL 4.7K 1% 1/4W** 155, 160, 165, 167, 169, 188, 238, 251, 277, 316, 505, 507, R164, 221, 224, 237, 239, 544, 677 243, 533 1-214-132-00 RES, METAL 1K 1% 1/4W 1-214-149-00 **RES, METAL 5.1K 1% 1/4W** R112, 272, 279, 305, 610, 611, R204, 242 1-214-151-00 **RES, METAL 6.2K 1% 1/4W** 612, 613, 614, 615, 616, 617, 618, 662, 663, 664, 665, 666, R201, 551, 552 667, 668, 669, 670, 673, 1-214-153-00 RES. METAL 7.5K 1% 1/4W 1-214-133-00 **RES, METAL 1.1K 1% 1/4W** R129 **RES, METAL 8.2K 1% 1/4W** 1-214-154-00 R265, 270, 527, 641 R548 1-214-155-00 **RES, METAL 9.1K 1% 1/4W** 1-214-134-00 RES, METAL 1.2K 1% 1/4W R138, 166, 172, 179, 181, 183, 300, 317, 572, 653 R121, 209, 278, 302, 516, 568, 1-214-156-00 **RES. METAL 10K 1% 1/4W** 593, 648, 674 1-214-136-00 **RES, METAL 1.5K 1% 1/4W** R114, 156, 212, 282, 633, 634 R135, 304, 569, 649 1-214-158-00 RES, METAL 12K 1% 1/4W 1-214-137-00 RES, METAL 1.6K 1% 1/4W R528 1-214-159-00 **RES, METAL 13K 1% 1/4W** R192, 215, 266, 269, 275, 535, 571, 592, 595, 596, 603, 651 R148, 508, 524, 545, 550, 553, 1-214-138-00 RES, METAL 1.8K 1% 1/4W 576, 577, 579, 656, 678 1-214-160-00 **RES, METAL 15K 1% 1/4W** R147, 149, 223, 525 1-214-139-00 RES, METAL 2.0K 1% 1/4W R124, 184, 574, 575, 581, 679 1-214-161-00 RES, METAL 16K 1% 1/4W R1, 125, 162, 177, 178, 285, 402, 510, 555, 640 R589, 619, 639 1-214-140-00 RES, METAL 2.2K 1% 1/4W 1-214-163-00 **RES, METAL 20K 1% 1/4W** R109, 116, 119, 150, 191, R151, 681 210, 211, 216, 578, 601, 660 1-214-164-00 **RES. METAL 22K 1% 1/4W** 1-214-141-00 RES, METAL 2.4K 1% 1/4W R287, 624, 635 1-214-165-00 **RES, METAL 24K 1% 1/4W** R132, 547, 559, 606 1-214-142-00 **RES, METAL 2.7K 1% 1/4W** R122, 598 1-214-166-00 **RES, METAL 27K 1% 1/4W** R174, 229, 230, 286, 299, 301, 401, 583, 658, 659, 661, 682 R139, 145, 154, 157, 580 1-214-144-00 RES, METAL 3.3K 1% 1/4W 1-214-168-00 **RES. METAL 33K 1% 1/4W RES, METAL 39K 1% 1/4W** R128, 280, 281, 602, 655 R176 1-214-170-00 1-214-145-00 RES, METAL 3.6K 1% 1/4W R675 1-214-171-00 **RES, METAL 43K 1% 1/4W** R168 1-214-172-00 **RES, METAL 47K 1% 1/4W** R218, 573, 654

RES, METAL 3.9K 1% 1/4W

1-214-146-00

Ref. No.			Ref. No.			
or Q'ty	Part No.	Description	or Q'ty	Part No.	Description	
	.RD, BVT-800PS)		(PR-40 BOA	RD, BVT-800PS)		
R220, 283, !	529, 590, 638	•	L510	1-408-631-00	INDUCTOR	6.30
	1-214-173-00	RES, METAL 51K 1% 1/4W	L511	1-408-632-00	INDUCTOR	6.36
			L514	1-408-633-00	INDUCTOR	10.80
R585	1-214-177-00	RES, METAL 75K 1% 1/4W	L111, 112	1-408-635-00	INDUCTOR	12.40
			L106	1-408-637-00	INDUCTOR	13.00
R222, 546, 6	636					
	1-214-180-00	RES, METAL 100K 1% 1/4W	L508	1-408-648-00	INDUCTOR	14.80
			L509	1-408-649-00	INDUCTOR	
RV102	1-228-290-00	RES, VAR, METAL 500	L113	1-408-650-00	INDUCTOR	
			L116	1-408-863-00	INDUCTOR	
RV101, 104	, 108, 110, 503		L505	1-408-864-00	INDUCTOR	
	1-228-291-00	RES, VAR, METAL 1K				0.02
		•	L108	1-408-865-00	INDUCTOR	2 79
RV107	1-228-292-00	RES, VAR, METAL 2K	L109	1-408-866-00	INDUCTOR	
RV105	1-228-293-00	RES, VAR, METAL 5K	L502	1-408-867-00	INDUCTOR	
RV103	1-228-294-00	RES, VAR, METAL 10K	L104	1-408-868-00	INDUCTOR	
		,,	L105	1-408-869-00		
RV106, 109	, 501, 504, 505,		L 105	1-400-009-00	INDUCTOR	15.70
506, 508			L504	1-408-870-00	INDUCTOR	16.40
000, 000	1-228-295-00	RES, VAR, METAL 20K			INDUCTOR	
	1-220-230-00	TIEO, VAII, METAL ZON	L503	1-408-871-00	INDUCTOR	
RV1	1-230-738-21	RES, VAR, CARBON 200	L110	1-408-872-00	INDUCTOR	
	1-230-730-21	RES, VAR, CARBON 5K	L501	1-408-874-00	INDUCTOR	
1142, 3, 4, 5	1-230-740-21	rics, van, canbon si	L107	1-408-875-00	INDUCTOR	110
RB502, 503,	505, 508		L1, 2, 3, 4	1-421-329-00	COIL, CHOK	F
	1-231-450-00	RES BLOCK, 3.3KX8	T101, 102	1-446-330-00	TRANSOFM	
						,. 0202
R B506	1-231-504-00	RES BLOCK, 620X4	FB1, 2, 3, 4,	5, 6, 7, 8, 101,		
				104, 105, 106,		
RB102, 103,	104, 105		501, 502	,,,		
	1-231-509-00	RES BLOCK, 1K	331,332	1-535-178-00	FERRITE BE	EΔD
RB101, 106,	504		S101	1-552-509-00	SWITCH, DII	P. 1-CKT
	1-231-521-00	RES BLOCK, 3.3KX4			J J	, , , ,
		•	S1, 2, 3, 4, 5	;		
RB501, 507	1-235-128-00	RES BLOCK, 1.5K	- 1, -, -, 1, -	1-554-010-00	SWITCH, TO	GGI F
RB1	1-235-130-00	RES BLOCK, 680K		. 55 . 5 . 5 . 5	J 101., 10	
CP501	1-235-206-00	CR BLOCK	VC0501	1-567-070-00	VCO CRVS	TAL, 10.8750MHz
R315, 532	1-247-895-00	RES, CARBON 470K 5% 1/6W	S6	1-570-281-11	SWITCH, DI	
		,	5 PCS	2-282-313-11	KNOB, CON	
R200, 202, 5	566, 652			103, 104, 105, 1		TROL
,,	1-247-900-00	RES, CARBON 750K 5% 1/6W	108 109	. 110, 111, 112, 5	00, 107,	
		1100, 071110011 70011 070 77011		505, 506, 507	01, 302,	
R219, 549	1-247-901-00	RES, CARBON 820K 5% 1/6W		103, 104, 105, 10	6 107	
R173	1-247-903-00	RES, CARBON 1.0M 5% 1/6W	109 501 6	502, 503, 504, 50	0,107, E EOS EOZ	
L115	1-408-419-00	INDUCTOR, MICRO 68 5%	100,501,5	3-657-235-00		TD
	1-400-413-00	in Door on, Micho do 3/6		3-057-235-00	TERMINAL,	, 17
L101, 102			1 PC	3-673-249-01	LĘVER, PC	BOARD
	1-408-421-00	INDUCTOR, MICRO 100 5%	5 PCS	7-621-737-08		HEX. 2.6X3
L103	1-408-425-00	INDUCTOR, MICRO 220 5%	6 PCS	7-621-912-20	SCREW, B 2	
L513	1-408-624-00	INDUCTOR 1.25	12 PCS	7-621-981-15	SCREW, PSV	
L507	1-408-626-00	INDUCTOR 2.28	2 PCS	7-626-320-11		
L506	1-408-627-00	INDUCTOR 2.49		020-020-11	PIN, SPRING	300
L114	1-408-628-00	INDUCTOR 2.72	D106, 107	8-719-101-98	DIODE 1000	7
L512	1-408-629-00	INDUCTOR 5.03	D100, 107	8-719-102-52	DIODE 1889	
-			D101	8-719-116-07	DIODE 15Z5	
			D502	8-719-151-07	DIODE RD1	
			2,002	G-7 13-13 I-07	DIODE RD5	. I E-B

Ref. No.			Ref. No.		
or Q'tv	Part No.	Description	or Q'ty	Part No.	Description
· - · ·		2 000. 12 (10.1)	5. 2 t,	1 0/1110.	Description.
/PP 40 PO A	RD, BVT-800PS	\	/BB 40 BO 4	DD DVT 00000	1
				RD, BVT-800PS	
	104, 105, 108, 1	09,	IC109	8-759 - 900-11	IC SN74LS11N, TTL
110, 111,	112, 113, 503		IC113	8-759- 9 00-58	IC HA1-4905
	8-719-815-55	DIODE 1S1555	IC112, 134	8-759-900-59	IC HI1-0201
			IC129	8-759-900-74	IC SN74LS74AN, TTL
D114, 120,	125, 126, 127, 5	D1	IC518	8-759-900-86	IC SN74LS86N, TTL
, ,	8-719-815-80	DIODE 1S1587			
	07.00.000	D.ODE 10.007	10100 110	0.750.004.00	10 CHT41 C400N TT
D440 447				8-759-901-23	IC SN74LS123N, TTL
D116, 117,			1C520, 524	8-759 -9 01-63	IC SN74LS163AN, TTL
D121, 122,	123, 124		IC107	8-759-901-91	IC SN74LS191N, TTL
	8-719-101-98	DIODE 18897	IC127, 528	8-759-902-21	IC SN74LS221N, TTL
			1C525	8-759-902-40	IC SN74LS240N, TTL
Q134	8-729-113-32	TRANSISTOR 2SB733			•
			IC515 521	8-759-902-73	IC SN74LS273N, TTL
0101 102	106 107 116 1	21			·
	106, 107, 115, 1	21,	IC527	8-759-903-74	IC SN74LS374N, TTL
122, 504,	511, 513, 516				
	8-729-117-54	TRANSISTOR 2SA1115	IC123, 509,	514	
				8-759-906-01	IC TL601CP
Q131, 136					
	8-729-353-00	TRANSISTOR 2SA530H	IC519, 523	8-759-906-70	IC SN74LS670N, TTL
			IC132	8-759-910-04	IC SN74S04N, TTL
0124 126	120 122 122 1	3 E			•
	130, 132, 133, 1:	35,	IC505	8-759-931-02	IC CA3102E
13/, 140,	503, 510, 515		IC105	8-759-974-06	IC SN7406N, TTL
	8-729-368-90	TRANSISTOR 2SC689H			
			IC111, 114,	117, 119, 122,	
Q103, 104, 1	105, 108, 109,		508, 510,	513	
110, 111,	112, 116, 117,			8-759-990-82	IC TL082CP
	125, 127, 502				
	8-729-672-43	TRANSISTOR 2SC2724	0110 120 1	501, 507, 517	
	0 /20 0/2 40	111/110101011011202/24	Q115, 120,		TO A MOIOTOD GOODS
OFOE	0.700.000.64	TO A MOIOTOD ACADOE		8-761-622-00	TRANSISTOR 2SC1636
Q505	8-729-699-51	TRANSISTOR 2SA995			
			Q 50 6	8-765-300-00	TRANSISTOR 2SC2009
IC101, 116,	118, 501, 503, 5	i 11			
	8-749-936-51	IC BX365A	Q113, 114,	128, 129, 138,	
			139, 512		
IC504, 512	8-752-005-11	IC CX20051A	•	8-769-193-09	TRANSISTOR 2SK43-3
•	8-752-005-20	IC CX20052		0.00.000	
· · · · · · · · · · · · · · · · · · ·	8-759-000-05	IC MC1496G; MOTOROLA			
•	8-759-103-19	IC UPC319C			
IC1, 104	8-759-132-40	IC UPC324C			
IC120, 502,	506, 507, 517				
	8-759-145-57	IC UPC4557C			
IC102	8-759-200-60	IC TA7060AP			
10 102	6-759-200-00	IC TA7000AF			
	400 400				
IC125, 126,	•				
	8-759-300-25	IC HD10125			
IC522	8-759-001-16	IC MC10116L			
IC103	8-759-900-00	IC SN74LS00N, TTL			
IC 128	8-759-900-02	IC SN74LS02N, TTL			
	5-7-50-500-02	10 0:47 7 600 211, 11 1			
10400					
IC133, 516,	526				

8-759-900-04

IC SN74LS04N, TTL

Ref. No.			Ref. No.			
or Q'ty	Part No.	Description	or Q'ty	Part No.	Description	
CK-11 B	DARD (BVT	-800PS)	(CK-11 BOA	RD, BVT-800PS)	
			R71, 84	1-214-101-00		51 1% 1/4W
1 PC	A-6259-216-A	COMPLETE PCB, CK-11	R19	1-214-104-00	· · · · · · · · · · · · · · · · · · ·	68 1% 1/4W
(This assemb	ly includes the fo	ollowing parts.)	R14, 66	1-214-108-00		100 1% 1/4W
			R18, 85	1-214-110-00		120 1% 1/4W
C23, 82, 131	l, 132		R23	1-214-112-00		150 1% 1/4W
	1-102-110-00	CAP, CERAMIC 220PF 10% 50V			,	100 170 17401
			R30	1-214-114-00	RES, METAL	180 1% 1/4W
C14, 15, 31	1-102-114-00	CAP, CERAMIC 470PF 10% 50V	R33, 76, 79	1-214-115-00	RES, METAL	200 1% 1/4W
C55	1-102-859-00	CAP, CERAMIC 75PF 5% 50V	R43	1-214-116-00		220 1% 1/4W
C49, 50	1-107-077-00	CAP, MICA 47PF 5% 50V	R22	1-214-118-00	RES, METAL	270 1% 1/4W
C38, 65	1-107-082-00	CAP, MICA 75PF 5% 50V	R99	1-214-120-00	RES, METAL	330 1% 1/4W
C32	1-107-083-00	CAP, MICA 82PF 5% 50V				-
		•	R9	1-214-122-00	RES, METAL	390 1% 1/4W
C4, 5	1-107-085-00	CAP, MICA 100PF 5% 50V	R50	1-214-123-00		430 1% 1/4W
C1, 2, 46	1-107-210-00	CAP, MICA 22PF 5% 500V	R69, 87	1-214-125-00		510 1% 1/4W
C33, 34	1-109-539-00	CAP, MICA 150PF 5% 100V	R78	1-214-127-00		620 1% 1/4W
C43	1-109-542-00	CAP, MICA 220PF 5% 100V	R49, 95	1-214-128-00		680 1% 1/4W
C3	1-109-553-00	CAP, MICA 470PF 5% 100V	R102	1-214-131-00		910 1% 1/4W
					·	
C69, 72	1-109-561-00	CAP, MICA 0.001 5% 100V		2, 35, 39, 72,		
			81, 83, 88,			
C85, 87, 89,				1-214-132-00	RES, METAL	1K 1% 1/4W
	1-123-344-00	CAP, ELECT 47 35V				
			R27	1-214-136-00	RES, METAL	1.5K 1% 1/4W
C30, 76, 77,			D44 47 54	CO OC OO		
	1-130-471-00	CAP, MYLAR 0.001 5% 50V	R41, 47, 51,			
				1-214-140-00	RES, METAL	2.2K 1% 1/4W
C75	1-130-473-00	CAP, MYLAR 0.0015 5% 50V	D 00			
C81	1-130-483-00	CAP, MYLAR 0.01 5% 50V	R7, 63	1-214-142-00	RES, METAL	2.7K 1% 1/4W
C74	1-130-487-00	CAP, MYLAR 0.022 5% 50V				
C79, 83	1-130-489-00	CAP, MYLAR 0.033 5% 50V	R40, 56, 57,			
C44	1-130-493-00	CAP, MYLAR 0.068 5% 50V	67, 98, 114			
				1-214-144-00	RES, METAL	3.3K 1% 1/4W
C73	1-130-495-00	CAP, MYLAR 0.1 5% 50V				
C7	1-130-852-00	CAP, FILM 0.0015 5% 100V	R48, 74, 75,			
C6	1-130-853-00	CAP, FILM 0.0047 5% 100V		1-214-148-00	RES, METAL	4.7K 1% 1/4W
C47, 48	1-131-343-00	CAP, TANT 0.22 10% 35V				
C78	1-131-344-00	CAP, TANT 0.33 10% 35V	R11, 37, 42,			
				1-214-149-00	RES, METAL	5.1K 1% 1/4W
C9, 28, 29	1-131-345-00	CAP, TANT 0.47 10% 35V				
C8	1-131-355-00	CAP, TANT 2.2 10% 25V	R1, 2, 73, 82			
C63, 64	1-131-357-00	CAP, TANT 4.7 10% 25V		1-214-150-00	RES, METAL	5.6K 1% 1/4W
C10 20 cc	27 00 02 74		D12	1 214 152 00	BEC META:	C OV 40/ 4/4121
C 19, 20, 36,	37, 66, 68, 71		R13	1-214-152-00		6.8K 1% 1/4W
	1-131-373-00	CAP, TANT 22 10% 16V	R4	1-214-153-00		7.5K 1% 1/4W
005 45 54			R3	1-214-154-00	RES, METAL	8.2K 1% 1/4W
C35, 45, 51,	53, 54, 56, 59		P10 16 17	20 21 24 25 2	e 20	
	1-161-039-00	CAP, CERAMIC 0.001 10% 50V		20, 21, 24, 25, 2 44, 45, 60, 70, 7		
C10 11 12	13, 16, 17, 18, 2	21 22 24	,,,	1-214-156-00		10K 1% 1/4W
	39, 40, 41, 42, 5				, WEINE	1/4 1/411
	67, 70, 84, 86, 8		R109	1-214-158-00	RES. METAL	12K 1% 1/4W
	96, 97, 98, 99, 1		R103	1-214-159-00		13K 1% 1/4W
	96, 97, 98, 99, 1 104, 105, 106, 10				, WE IAL	1/4 1/411
	104, 105, 106, 10 111, 112, 113, 11		R12, 31, 36,	108		
100, 110, 1	1-161-055-00		, - 1, 00,	1-214-162-00	RES. METAL	18K 1% 1/4W
	1-101-055-00	CAP, CERAMIC 0.022 10% 50V			, , AL	1/0 1/311

Ref. No.		Description	Ref. No.		
or Q'ty	Part No.	Description	or Q'ty	Part No.	Description
(CK-11 BOA	RD, BVT-800PS)	(CK-11 BOA	ARD, BVT-800PS	3)
R6	1-214-164-00	RES. METAL 22K 1% 1/4W	Q1, 6, 8	8-729-612-77	TRANSISTOR 2SA1027R
R112	1-214-165-00	RES, METAL 24K 1% 1/4W	_,,,,		
			Q2, 3, 4, 5,	7, 9, 10, 11	
R46, 61, 62,	, 105			8-729-672-43	TRANSISTOR 2SC2724
	1-214-168-00	RES, METAL 33K 1% 1/4W			
			IC1B, 9T	8-749-938-10	IC BX381
R113	1-214-169-00	RES, METAL 36K 1% 1/4W	IC9P, 10K	8-759-103-19	IC UPC319C
R92	1-214-170-00	RES, METAL 39K 1% 1/4W	IC3A, 3F	8-759-240-20	IC TC4020BP, CMOS
R52	1-214-171-00	RES, METAL 43K 1% 1/4W	IC9G	8-759-300-25	IC HD10125
			IC9S	8-759-745-60	IC NJM4560D
R53, 106, 1	07				
	1-214-172-00	RES, METAL 47K 1% 1/4W	IC4G	8-759-756-85	IC, PROM, TBP28S42N-YADR
			IC6H	8-759-756-86	IC, PROM, TBP28S42N-CADR
R115	1-214-174-00	RES, METAL 56K 1% 1/4W	IC2H	8-759-757-91	IC, PROM, MB7051-YCDL
R104	1-214-175-00	RES, METAL 62K 1% 1/4W	IC2N, 4E, 5	K, 5M, 8H, 9K, 1	10A
				8-759-900-00	IC SN74LS00N, TTL
R54, 59, 11	0, 111				
	1-214-180-00	RES, METAL 100K 1% 1/4W	IC1H, 2M, 2	2Q, 3K, 5E, 8D, 9)L
		•		8-759-900-04	IC SN74LS04N, TTL
RV1	1-228-292-00	RES, VAR, METAL 2K			•
	1-228-294-00	RES. VAR. METAL 10K	IC6D, 8S	8-759-900-08	IC SN74LS08N, TTL
LV1	1-407-564-00	COIL, VAR, 1.5	.000,00		
LV2	1-407-565-00	COIL, VAR, 2.2	IC 2D, 8E,	9V	
L1, 2	1-408-401-00	INDUCTOR, MICRO 2.2 5%	,,	8-759-900-10	IC SN74LS10N, TTL
				0,000,000	12 0111 120 1111, 1112
L3, 5, 6	1-421-329-00	COIL, CHOKE	IC10M	8-759-900-11	IC SN74LS11N, TTL
L4	1-421-459-00	COIL, CHOKE	IC6E	8-759-900-14	IC SN74LS14N, TTL
		·	IC8B	8-759-900-20	IC SN74LS20N, TTL
FB1, 2, 3, 4	. 5		ICST	8-759-900-32	IC SN74LS32N, TTL
	1-535-178-00	FERRITE BEAD	IC1D	8-759-900-51	IC SN74LS51N, TTL
			1010	0705 300 01	10 011, 4250 111, 112
S2	1-552-509-00	SWITCH, DIP, 1-CKT	IC10P	8-759-900-58	IC HA1-4905-5
S1	1-554-168-00	SWITCH, SLIDE	IC7G, 10S	8-759-900-59	IC HI1-0201
X1	1-567-070-00	VCO, CRYSTAL; 10.8750MHz	1074, 100	0.00000	
			IC2F 2P 3	B, 3G, 4D, 4F, 5	1
TP1, 2, 3, 4	, 5, 6, 7, 8, 9, 10,			M, 10X, 10Y, 10	
11, 12, 1	3, 14, 15		02, ,, 0	8-759-900-74	IC SN74LS74AN, TTL
E1, 2, 3, 4,	5, 6, 7, 8				
	3-657-235-00	TERMINAL, TP	IC3H	8-759-900-86	IC SN74LS86N, TTL
			ICSA, 9A	8-759-901-13	IC SN74LS113N, TTL
2 PCS	3-673-249-00	LEVER, PC BOARD	IC6K 8K		IC SN74LS114AN, TTL
6 PCS	7-621-912-20	SCREW, B 2.6X5	IC1N	8-759-901-23	IC SN74LS123N, TTL
12 PCS	7-621-981-15	SCREW, PSW 2.6X6	ICIN	6-759-50 1-25	10 314742312314, 1112
2 PCS	7-626-320-11	PIN, SPRING 3X8	IC1V 1W	2V, 2W, 3L, 3N,	
	, 525 525	, <u>.</u>		2V, 2V, 3L, 3N, IS, 3T, 3V, 3W, 4	v
D4, 5	8-712-540-06	DIODE 1T25-41		5W, 6V, 6W	Ψ,
D11	8-719-101-98	DIODE 1SS97	444,54,	8-759-901-28	IC MSM5128-12RS, NMOS
D8	8-719-191-07	DIODE RD9.1E		0-/55-501-26	1C MSMS 128-12H3, MMOS
	071010101		IC3E, 5B	8-759- 9 01-51	IC SN74LS151N, TTL
D1, 2, 3, 6,	7. 9. 10		1635,35	3-7 33-30 F-3 I	10 314/72313114, 112
	8-719-815-55	DIODE 1\$1555	IC19	8-759-901-57	IC SN74LS157N, TTL
	3		IC1P	0-/33-301-3/	10 014/450 10/14, 1 1 5
D12	8-719-911-19	DIODE 1SS119	ICCM CN	6P, 7M, 7N, 7P	
D13	8-719-911-19	DIODE 1SS119	ICONI, ON,	8-759-901-58	IC SN74LS158N, TTL
				0-109-901-98	10 SH/FLS1SON, IIL
			ICEC 71	BL, 8M, 8N, 8P, 8	in
			1030, / L, i	8-759-901-61	IC SN74LS161AN, TTL
				0-106-601-01	IO SITTESTOTAN, ITE

Ref. No. Ref. No. or Q'tv Part No. Description or Q'tv Part No. Description (CK-11 BOARD, BVT-800PS) MB-35 BOARD (BVT-800PS) IC1E, 1G, 1K, 2G, 4A, 6L, 7Q, 7R, 8R 1 PC A-6265-050-A COMPLETE PCB, MB-35 8-759-901-63 IC SN74LS163AN, TTL (This assembly includes the following parts.) IC1M, 1Y, 2Y, 3D, 3Y, 4Y, 1-123-334-00 C1, 2, 3, 4 **CAP, ELECT 220 25V** 5Y, 6Y, 7Y, 8C, 8Y, 9W R1. 2 1-213-131-00 **RES, METAL 100 5% 1W** 8-759-901-64 IC SN74LS164N, TTL CN5M 1-508-708-00 RECEP, 4P, MALE CN4M 1-508-709-00 RECEP, 5P, MALE IC1U, 2U, 3U, 4U, 5U, 6U, CN1, 2, 3 1-508-892-00 CONNECTOR, PCB, 100P 7U. 8U 8-759-901-66 IC SN74LS166AN, TTL CN8M, 35M, 38M, 39M 1-508-900-00 RECEP, 2P, MALE IC4H 8-759-901-74 IC SN74LS174N, TTL CN10M 1-508-903-00 RECEP, 5P, MALE IC1L, 2E, 2L, 3C, 4C, 7H, 9Z CN9M 1-508-906-00 RECEP, 10P, MALE 8-759-901-75 IC SN74LS175N, TTL CN11M 1-508-935-00 RECEP, 5P, MALE CN12M 1-508-936-00 RECEP, 6P, MALE IC1F, 4B, 5A, 6C, 7D, 9R CN6M 1-508-997-00 RECEP, 12P, MALE 8-759-902-21 IC SN74LS221N, TTL CN7M 1-560-190-00 RECEP, 20P, MALE IC6A 8-759-902-74 IC SN74LS423N, TTL 2 PCS 7-621-259-52 **SCREW, +P 2.6X8** IC2K 8-759-903-67 IC SN74LS367AN, TTL 2 PCS 7-622-207-05 **NUT. 2.6** 2 PCS 7-623-207-22 WASHER, SPRING, 2.6 IC1X, 2R, 2S, 2T, 2X, 3X, 2 PCS 7-688-002-11 WASHER, 2.6 4X, 5R, 5S, 5Q, 5X, 6X, 7S, 7T 8-759-903-74 IC SN74LS374N, TTL IC1R, 1S, 1T, 5T 8-759-903-77 IC SN74LS377N, TTL IC5D, 9X, 9Y 8-759-903-93 IC SN74LS393N, TTL IC5G 8-759-903-97 IC SN74LS684N, TTL IC6Q, 6R, 6S, 6T 8-759-904-96 IC MBM2149L55 IC9U 8-759-906-01 CN-46A BOARD (BVT-800PS) IC TL601CP IC5N, 5P 8-759-906-29 IC MB8147E 1 PC 1-605-785-00 PC BOARD, CN-46. IC5F, 5H, 6F, 6G WITHOUT COMPONENT 8-759-906-69 IC SN74LS669N, TTL CN17M 1-508-903-00 RECEP, 5P, MALE IC7E 8-759-910-51 IC SN74S51N, TTL **CN18M** RECEP, 10P, MALE 1-508-906-00 CN14M 1-508-933-00 RECEP, 2P, MALE IC7A, 7B, 7C CN15M 1-508-936-00 RECEP, 6P, MALE 8-759-941-63 IC SN74163N, TTL IC1C 8-759-942-65 IC SN74265N, TTL IC10D 8-759-957-09 IC FT5709M IC9J 8-759-974-06 IC SN7406N, TTL IC8G, 9 E, 10U 8-759-990-82 IC TL082CP IC10R, 10H 8-759-990-84 IC TL084CN

Ref. No.			Ref. No.		
or Q 'ty	Part No.	Description	or Q 'ty	Part No.	Description
IV-4A B	OARD (BVT	-800PS)	(IV.4A BOA	RD, BVT-800PS)
,	(3)	333. 37	R11, 50, 78		,
1 PC	A-6257-112-A	COMPLETE PCB, IV-4A	1111, 50, 70	1-214-132-00	RES. METAL 1K 1% 1/4W
	bly includes the t	following parts.)			1120, 112 174 174 1741
•	•		R43, 52	1-214-134-00	RES, METAL 1.2K 1% 1/4W
C31	1-107-085-00	CAP, MICA 100PF 5% 50V	R64	1-214-136-00	RES, METAL 1.5K 1% 1/4W
C12, 40, 42	1-107-210-00	CAP, MICA 22PF 5% 500V	R48	1-214-137-00	RES, METAL 1.6K 1% 1/4W
C34, 39	1-108-555-00	CAP, MYLAR 0.001 5% 50V	R77, 103	1-214-138-00	RES, METAL 1.8K 1% 1/4W
C22	1-108-567-00	CAP, MYLAR 0.0033 5% 50V	R31, 89	1-214-139-00	RES, METAL 2.0K 1% 1/4W
C35	1-109-542-00	CAP, MICA 220PF 5% 100V			•
			R26, 72, 76	1-214-142-00	RES, METAL 2.7K 1% 1/4W
C20	1-109-545-00	CAP, MICA 270PF 5% 100V	R70	1-214-144-00	RES, METAL 3.3K 1% 1/4W
C19	1-109-748-00	CAP, MICA 21PF +/-0.5PF 100V	R71	1-214-146-00	RES, METAL 3.9K 1% 1/4W
C1 2 E 7	11 12 16 10		50 4 50 50		
26, 28, 33	11, 13, 16, 18, }		83, 85, 86,	2, 28, 34, 69, 79, 95, 102	
	1-123-342-00	CAP, ELECT 22 35V	55, 55, 60 ,	1-214-148-00	RES, METAL 4.7K 1% 1/4W
	- ·- · · ·			. 217 170.00	
C41	1-131-347-00	CAP, TANT 1 10% 35V	R30	1-214-149-00	RES, METAL 5.1K 1% 1/4W
C38	1-131-359-00	CAP, TANT 10 10% 25V	R82	1-214-153-00	RES, METAL 7.5K 1% 1/4W
C44	1-161-039-00	CAP, CERAMIC 0.001 10% 50V	R5, 29, 51	1-214-155-00	RES, METAL 9.1K 1% 1/4W
			R75, 80	1-214-156-00	RES, METAL 10K 1% 1/4W
	10, 14, 15, 17,		R100, 104	1-214-158-00	RES, METAL 12K 1% 1/4W
	, 25, 27, 29, 30,				
32, 36, 37			R25, 81	1-214-160-00	RES, METAL 15K 1% 1/4W
	1-161-055-00	CAP, CERAMIC 0.022 10% 50V	R98	1-214-172-00	RES, METAL 47K 1% 1/4W
00	4 404 000 04	040 0504440 047 504	R94	1-214-173-00	RES, METAL 51K 1% 1/4W
C9 R32	1-161-898-31 1-214-093-00	CAP, CERAMIC 0.47 50V RES, METAL 24 1% 1/4W			
noz	1-214-055-00	RES, WETAL 24 1/6 1/411	R21, 23, 24	•	BEC 14851 40014 404 44104
R10, 37, 62	2, 65, 66, 68, 73,	74		1-214-180-00	RES, METAL 100K 1% 1/4W
,,	1-214-100-00	RES, METAL 47 1% 1/4W	RV2	1-224-978-00	DEC VAD METAL EO
			RV1	1-228-288-00	RES, VAR, METAL 50 RES, VAR, METAL 100
R3	1-214-101-00	RES, METAL 51 1% 1/4W	RV4, 5	1-228-290-00	RES, VAR, METAL 100
		•	RV3	1-228-291-00	RES, VAR, METAL 1K
R1, 19, 57,	58, 59, 60, 61, 6	7	RV6	1-228-296-00	RES, VAR, METAL TO
	1-214-105-00	RES, METAL 75 1% 1/4W		. 220 200 00	nes, van, me rae son
			R6	1-247-049-00	RES, CARBON 470K 5% 1/6W
R7, 13, 17,	33, 35, 36, 88		R91	1-247-887-31	RES, CARBON 220K 5% 1/6W
	1-214-108-00	RES, METAL 100 1% 1/4W	L2	1-407-161-00	INDUCTOR, MICRO 22 5%
			L1	1-407-187-00	INDUCTOR, MICRO 5.6 5%
R44, 45	1-214-112-00	RES, METAL 150 1% 1/4W	L501	1-408-874-00	INDUCTOR 81
			CN36M	1-508-900-00	RECEP, 2P, MALE
R27, 38, 39		DEC BETTAL 200 40/ 4/4M			
	1-214-115-00	RES, METAL 200 1% 1/4W	CN19M, 22M		
R16, 18, 41	. 53			1-508-936-00	RECEP, 6P, MALE
= 7 (0, 4)	1-214-116-00	RES, METAL 220 1% 1/4W	01/0414	1 500 051 05	DECED 400 May 5
			CN21M	1-508-951-00	RECEP, 10P, MALE
R15	1-214-117-00	RES, METAL 240 1% 1/4W	CN20M	1-508-997-00	RECEP, 12P, MALE
R12, 14, 42	1-214-119-00	RES, METAL 300 1% 1/4W	ED1 2 2 4	5 6 7 0 A	
	1-214-121-00	RES, METAL 360 1% 1/4W	FB1, Z, 3, 4	, 5, 6, 7, 8, 9 1-535-178-00	EEDDITE DEAD
R63, 99	1-214-124-00	RES, METAL 470 1% 1/4W		1-555-176-00	FERRITE BEAD
R84	1-214-125-00	RES, METAL 510 1% 1/4W	TP1 2 3 /	5, 6, 7, 8, 9, 10,	11
			E1, 2, 3, 4	, 5, 6, 7, 6, 8, 10,	11
R8, 9	1-214-128-00	RES, METAL 680 1% 1/4W	, 2, 3, 7	3-657-235-00	TERMINAL, TP
R96	1-214-129-00	RES, METAL 750 1% 1/4W		_ 55, _55,00	
R40	1-214-131-00	RES, METAL 910 1% 1/4W			

Ref. No.			Ref. No.		
or Q'ty	Part No.	Description	or Q'ty	Part No.	Description
(IV-4A BO	ARD, BVT-800PS	()	DP-24A	BOARD (BV	/T-800PS)
2 PCS	4-835-627-00	FASTENER		20,2	, 6001 67
1 PC	7-686-527-01	SCREW, PSW 3X6	1 PC	Δ-6265-049-Δ	COMPLETE PCB, DP-24A
D16, 17	8-719-104-10	DIODE 1SS99		bly includes the f	
D6, 11	8-719-115-07		(11110 0000111	ory merados the h	onowing parts.
D5, 10	8-719-151-07		R5, 6	1-214-113-00	RES, METAL 160 1% 1/4W
D20	8-719-191-07		-	1-214-120-00	RES, METAL 330 1% 1/4W
			CN13M	1-508-949-00	RECEP, 12P, MALE
D12, 13, 1	8. 19. 21		D8. 9	8-719-901-34	LED, LD003, RED/GREEN/RED
- 1-, 1-, 1	8-719-815-55	DIODE 181555			110, 1000, 1120, 011211, 1120
			D1, 2, 3, 4,	5. 7	
D1, 2, 3, 4,	7, 8, 9, 22		, _,	8-719-901-48	LED, LT-9010N, GREEN
	8-719-815-80	DIODE 1S1587			,,
			D6	8-719-901-49	LED, LT-9010H, YELLOW
Q4, 5	8-729-023-69	TRANSISTOR 2N2369A	IC2	8-759-974-06	IC SN7406N, TTL
Q13, 19	8-729-117-54	TRANSISTOR 2SA1175	IC1	8-759-974-07	IC SN7407N, TTL
Q11, 12	8-729-211-99	TRANSISTOR 2SC1199	IC3	8-759-974-38	IC SN7438N, TTL
02, 9	8-729-658-32	TRANSISTOR 2SC1583			
Q14, 15, 10	6, 17, 18				
	8-729-672-43	TRANSISTOR 2SC2724			
Q3, 8	8-729-699-51	TRANSISTOR 2SA995			
1C3	8-729-099-51				
IC3 IC1	8-759-000-05 8-759-132-40	IC MC1496G; MOTOROLA IC UPC324C			
IC7	8-759-145-57	IC UPC4557C			
IC5	8-759-901-23	IC SN74LS123N, TTL			
IC4	8-759-907-10	IC TL710CP			
	0 700 007 10	10 127 100.			
IC2	8-759-974-38	IC SN7438N, TTL			
Q1	8-761-510-10	TRANSISTOR 2SK58-1X			
Q6, 7	8-761-622-00	TRANSISTOR 2SC1636			
Q10	8-765-300-00	TRANSISTOR 2SC2009	PW-91A	BOARD (B)	/T-800PS)
			1 PC	V-6363 U43 V	COMPLETE BCD DW 01 A

1 PC A-6263-042-A COMPLETE PCB, PW-91A (This assembly includes the following parts.)

Q2, 3 X-3673-224-1 TRANSISTOR 2SC2625, 2 PCS
This part is the kit of two transistors.
Replace Q2 & Q3 at the same time.

C71, 91, 111, 131
1-107-082-00 CAP, MICA 75PF 5% 50V

C17 1-108-567-00 CAP, MYLAR 0.0033 5% 50V

C51, 52, 53, 54
1-108-579-00 CAP, MYLAR 0.01 5% 50V

C72, 132 1-123-307-00 CAP, ELECT 100 10V

C55, 58, 59, 60, 61, 62, 63

1-123-824-00 CAP, ELECT 220 25V

	Ref. No.			Ref. No.		
	or Q 'ty	Part No.	Description	or Q'ty	Part No.	Description
	/D\M/ 0.1 A BO	ARD, BVT-800P	e)	(PW-014 RC	DARD, BVT-800P	(2)
	C9	1-123-981-00	CAP, ELECT 4.7 450V	R86, 87, 10		3)
	C18	1-123-982-00	CAP, ELECT 3.3 63V	1100, 67, 10	1-214-141-00	RES, METAL 2.4K 1% 1/4W
			CAP, ELECT 470 16V		1-2 14-14 1-00	RES, WETAL 2.4R 1% 1/41
	C56, 57	1.123.983.00		D00 1EE	1 214 142 00	DEC METAL 20V 49/ 1/4W
	C10, 11	1-123-984-00	CAP, ELECT 4.7 250V	R88, 155	1-214-143-00	RES, METAL 3.0K 1% 1/4W
	C7, 8	1-125-282-00	CAP, ELECT 470 200V	D04 00 12	0 143	
				R84, 99, 12	•	DEC MAETAL 2:28 49/ 4/4M
Δ	C2 A E 6	1 120 054 00	CAP. FILM 0.0022 250V		1-214-144-00	RES, METAL 3.3K 1% 1/4W
-	C3, 4, 5, 6	1-130-854-00	CAP, FILM 0.0022 250V	R106, 144	1 214 140 00	DEC METAL ESV 19/ 1/4W
X0000000				R103, 139	1-214-149-00 1-214-150-00	RES, METAL 5.1K 1% 1/4W RES, METAL 5.6K 1% 1/4W
	C14, 16	1-131-356-00	CAP, TANT 3.3 10% 25V	R121		
	014, 10	1101 000 00	JAI, TAIT 0.0 7070 201	R79	1-214-152-00	RES, METAL 6.8K 1% 1/4W
98/28/28	00000000000000000000000000000000000000	000000000000000000000000000000000000000		n/9	1-214-158-00	RES, METAL 12K 1% 1/4W
A	C2	1-136-210-00	CAP, FILM 0.01 250V	D00 10E 1	10 1/7 151	
	888888888888888		-	Nos, 105, 1	18, 147, 151	DEC METAL 16V 19/ 1/AM
					1-214-161-00	RES, METAL 16K 1% 1/4W
	:00:00:00:00:00:00:00:00:00:00:00:00:00	333		R80	1 214 164 00	DEC METAL 228 19/ 1/4W
	, C1	1-136-212-00	CAP, FILM 0.1 250V	R7	1-214-164-00 1-215-242-00	RES, METAL 22K 1% 1/4W RES, METAL 150 5% 3W
5050000				R55	1-217-300-00	•
	C12	1-161-740-00	CAP, CERAMIC 470PF 10% 400V	noo	1-217-300-00	RES, WIREWOUND 15 5W 10%
				R9 72 73	91, 111, 131	
330030	388888888888888888			110, 12, 10,	1-217-621-00	RES, METAL 0.1 10% 2W
Δ	R1	1-205-739-00	RES, WIREWOUND 8.2 10% 5W			1120, 1121742 0.1 1070 211
338633			:	28.200000000000000000000000000000000000	55.555.5505.05505.05506.955.95	
				<u> </u>	1-217-623-00	RES, FUSIBLE 3K 5% 2W
	R11, 13	1-212-497-00	RES, METAL 33 1% 1/2W	<u> </u>		1120,1001012
	R21, 22	1-212-498-00	RES, METAL 36 1% 1/2W			
	D45 40 47	40		RV71, 91, 1	11. 131	
	R15, 16, 17,		DEC. 1677	,,.	1-228-290-00	RES, VAR, METAL 500
		1-212-703-00	RES, METAL 110K 1% 1/2W			,,
		4 -44 - 654 - 65	DEC 145741 40 40/ 4/414/	RV72, 92, 1	32, 151	
	R77	1-214-084-00	RES, METAL 10 1% 1/4W		1-228-292-00	RES, VAR, METAL 2K
	D4.4	4 044 400 00	DEC 105741 47 40/ 1/4M			
	R14	1-214-100-00	RES, METAL 47 1% 1/4W	R19, 20	1-244-928-00	RES, CARBON 200K 5% 1/2W
	DOO 00 00	400		· ·		
	R82, 83, 98,			NO, 12	1-246-432-00	RES, CARBON 20 5% 1/4W
			DEC METAL E1 10/ 1/AM	R8, 12	1-246-432-00	RES, CARBON 20 5% 1/4W
		1-214-101-00	RES, METAL 51 1% 1/4W	R74, 92, 11		RES, CARBON 20 5% 1/4W
	DOC 447 44	1-214-101-00	RES, METAL 51 1% 1/4W			RES, CARBON 20 5% 1/4W RES, CARBON 680 5% 1/4W
	R96, 117, 11	1-214-101-00 19, 135			2, 132	
	R96, 117, 1 1	1-214-101-00	RES, METAL 51 1% 1/4W		2, 132	
		1-214-101-00 19, 135 1-214-108-00	RES, METAL 100 1% 1/4W	R74, 92, 11	2, 132 1-246-469-00	RES, CARBON 680 5% 1/4W
	R6	1-214-101-00 19, 135 1-214-108-00 1-214-109-00	RES, METAL 100 1% 1/4W RES, METAL 110 1% 1/4W	R74, 92, 11	2, 132 1-246-469-00 1-246-811-00	RES, CARBON 680 5% 1/4W
		1-214-101-00 19, 135 1-214-108-00	RES, METAL 100 1% 1/4W	R74, 92, 11	2, 132 1-246-469-00 1-246-811-00	RES, CARBON 680 5% 1/4W
	R6 R116	1-214-101-00 19, 135 1-214-108-00 1-214-109-00 1-214-113-00	RES, METAL 100 1% 1/4W RES, METAL 110 1% 1/4W	R74, 92, 11	2, 132 1-246-469-00 1-246-811-00 22, 142	RES, CARBON 680 5% 1/4W RES, CARBON 220K 5% 1/8W
	R6	1-214-101-00 19, 135 1-214-108-00 1-214-109-00 1-214-113-00 3, 133	RES, METAL 100 1% 1/4W RES, METAL 110 1% 1/4W RES, METAL 160 1% 1/4W	R74, 92, 11	2, 132 1-246-469-00 1-246-811-00 22, 142 1-247-046-00	RES, CARBON 680 5% 1/4W RES, CARBON 220K 5% 1/8W
	R6 R116	1-214-101-00 19, 135 1-214-108-00 1-214-109-00 1-214-113-00	RES, METAL 100 1% 1/4W RES, METAL 110 1% 1/4W	R74, 92, 11 R97, 136 R81, 102, 1	2, 132 1-246-469-00 1-246-811-00 22, 142 1-247-046-00	RES, CARBON 680 5% 1/4W RES, CARBON 220K 5% 1/8W RES, CARBON 270K 5% 1/8W RES, CARBON 10 5% 1/4W
	R6 R116 R75, 93, 113	1-214-101-00 19, 135 1-214-108-00 1-214-109-00 1-214-113-00 3, 133 1-214-115-00	RES, METAL 100 1% 1/4W RES, METAL 110 1% 1/4W RES, METAL 160 1% 1/4W RES, METAL 200 1% 1/4W	R74, 92, 11 R97, 136 R81, 102, 1	2, 132 1-246-469-00 1-246-811-00 22, 142 1-247-046-00	RES, CARBON 680 5% 1/4W RES, CARBON 220K 5% 1/8W RES, CARBON 270K 5% 1/8W
	R6 R116 R75, 93, 113	1-214-101-00 19, 135 1-214-108-00 1-214-109-00 1-214-113-00 3, 133 1-214-115-00 1-214-116-00	RES, METAL 100 1% 1/4W RES, METAL 110 1% 1/4W RES, METAL 160 1% 1/4W RES, METAL 200 1% 1/4W RES, METAL 220 1% 1/4W	R74, 92, 11 R97, 136 R81, 102, 1 R51, 52, 53	2, 132 1-246-469-00 1-246-811-00 22, 142 1-247-046-00 3, 54 1-247-083-00	RES, CARBON 680 5% 1/4W RES, CARBON 220K 5% 1/8W RES, CARBON 270K 5% 1/8W RES, CARBON 10 5% 1/4W
	R6 R116 R75, 93, 113 R115 R76	1-214-101-00 19, 135 1-214-108-00 1-214-113-00 1-214-113-00 3, 133 1-214-115-00 1-214-116-00 1-214-122-00	RES, METAL 100 1% 1/4W RES, METAL 110 1% 1/4W RES, METAL 160 1% 1/4W RES, METAL 200 1% 1/4W RES, METAL 220 1% 1/4W RES, METAL 390 1% 1/4W	R74, 92, 11 R97, 136 R81, 102, 1 R51, 52, 53	2, 132 1-246-469-00 1-246-811-00 22, 142 1-247-046-00 3, 54 1-247-083-00	RES, CARBON 680 5% 1/4W RES, CARBON 220K 5% 1/8W RES, CARBON 270K 5% 1/8W RES, CARBON 10 5% 1/4W
	R6 R116 R75, 93, 113 R115 R76 R154	1-214-101-00 19, 135 1-214-108-00 1-214-113-00 1-214-113-00 3, 133 1-214-115-00 1-214-116-00 1-214-125-00	RES, METAL 100 1% 1/4W RES, METAL 110 1% 1/4W RES, METAL 160 1% 1/4W RES, METAL 200 1% 1/4W RES, METAL 220 1% 1/4W RES, METAL 390 1% 1/4W RES, METAL 510 1% 1/4W	R74, 92, 11 R97, 136 R81, 102, 1 R51, 52, 53	2, 132 1-246-469-00 1-246-811-00 22, 142 1-247-046-00 3, 54 1-247-083-00 1-247-765-00	RES, CARBON 680 5% 1/4W RES, CARBON 220K 5% 1/8W RES, CARBON 270K 5% 1/8W RES, CARBON 10 5% 1/4W RES, CARBON 33K 5% 1/2W
	R6 R116 R75, 93, 113 R115 R76 R154 R71, 123	1-214-101-00 19, 135 1-214-108-00 1-214-113-00 1-214-113-00 3, 133 1-214-115-00 1-214-116-00 1-214-122-00 1-214-125-00 1-214-132-00	RES, METAL 100 1% 1/4W RES, METAL 110 1% 1/4W RES, METAL 160 1% 1/4W RES, METAL 200 1% 1/4W RES, METAL 220 1% 1/4W RES, METAL 390 1% 1/4W RES, METAL 510 1% 1/4W RES, METAL 1K 1% 1/4W	R74, 92, 11 R97, 136 R81, 102, 1 R51, 52, 53 R5	2, 132 1-246-469-00 1-246-811-00 22, 142 1-247-046-00 3, 54 1-247-083-00 1-247-765-00	RES, CARBON 680 5% 1/4W RES, CARBON 220K 5% 1/8W RES, CARBON 270K 5% 1/8W RES, CARBON 10 5% 1/4W RES, CARBON 33K 5% 1/2W INDUCTOR, MICRO 1mH 5%
	R6 R116 R75, 93, 113 R115 R76 R154	1-214-101-00 19, 135 1-214-108-00 1-214-113-00 1-214-113-00 3, 133 1-214-115-00 1-214-116-00 1-214-125-00	RES, METAL 100 1% 1/4W RES, METAL 110 1% 1/4W RES, METAL 160 1% 1/4W RES, METAL 200 1% 1/4W RES, METAL 220 1% 1/4W RES, METAL 390 1% 1/4W RES, METAL 510 1% 1/4W	R74, 92, 11 R97, 136 R81, 102, 1 R51, 52, 53 R5 L3 L51	2, 132 1-246-469-00 1-246-811-00 22, 142 1-247-046-00 3, 54 1-247-083-00 1-247-765-00 1-408-654-00 1-413-089-00	RES, CARBON 680 5% 1/4W RES, CARBON 220K 5% 1/8W RES, CARBON 270K 5% 1/8W RES, CARBON 10 5% 1/4W RES, CARBON 33K 5% 1/2W INDUCTOR, MICRO 1mH 5% COIL, SN
	R6 R116 R75, 93, 113 R115 R76 R154 R71, 123 R78	1-214-101-00 19, 135 1-214-108-00 1-214-113-00 3, 133 1-214-115-00 1-214-116-00 1-214-122-00 1-214-125-00 1-214-135-00	RES, METAL 100 1% 1/4W RES, METAL 110 1% 1/4W RES, METAL 160 1% 1/4W RES, METAL 200 1% 1/4W RES, METAL 220 1% 1/4W RES, METAL 390 1% 1/4W RES, METAL 510 1% 1/4W RES, METAL 1K 1% 1/4W RES, METAL 1.3K 1% 1/4W	R74, 92, 11 R97, 136 R81, 102, 1 R51, 52, 53 R5 L3 L51 L52, 53	2, 132 1-246-469-00 1-246-811-00 22, 142 1-247-046-00 3, 54 1-247-083-00 1-247-765-00 1-408-654-00 1-413-089-00 1-413-090-00	RES, CARBON 680 5% 1/4W RES, CARBON 220K 5% 1/8W RES, CARBON 270K 5% 1/8W RES, CARBON 10 5% 1/4W RES, CARBON 33K 5% 1/2W INDUCTOR, MICRO 1mH 5% COIL, SN COIL, SN
	R6 R116 R75, 93, 113 R115 R76 R154 R71, 123	1-214-101-00 19, 135 1-214-108-00 1-214-113-00 1-214-113-00 3, 133 1-214-115-00 1-214-116-00 1-214-122-00 1-214-125-00 1-214-132-00	RES, METAL 100 1% 1/4W RES, METAL 110 1% 1/4W RES, METAL 160 1% 1/4W RES, METAL 200 1% 1/4W RES, METAL 220 1% 1/4W RES, METAL 390 1% 1/4W RES, METAL 510 1% 1/4W RES, METAL 1K 1% 1/4W	R74, 92, 11 R97, 136 R81, 102, 1 R51, 52, 53 R5 L3 L51 L52, 53	2, 132 1-246-469-00 1-246-811-00 22, 142 1-247-046-00 3, 54 1-247-083-00 1-247-765-00 1-408-654-00 1-413-089-00 1-413-090-00	RES, CARBON 680 5% 1/4W RES, CARBON 220K 5% 1/8W RES, CARBON 270K 5% 1/8W RES, CARBON 10 5% 1/4W RES, CARBON 33K 5% 1/2W INDUCTOR, MICRO 1mH 5% COIL, SN COIL, SN
	R6 R116 R75, 93, 113 R115 R76 R154 R71, 123 R78	1-214-101-00 19, 135 1-214-108-00 1-214-113-00 3, 133 1-214-115-00 1-214-115-00 1-214-122-00 1-214-125-00 1-214-135-00 1-214-135-00 1-214-139-00	RES, METAL 100 1% 1/4W RES, METAL 110 1% 1/4W RES, METAL 160 1% 1/4W RES, METAL 200 1% 1/4W RES, METAL 220 1% 1/4W RES, METAL 390 1% 1/4W RES, METAL 510 1% 1/4W RES, METAL 1K 1% 1/4W RES, METAL 1.3K 1% 1/4W RES, METAL 1.3K 1% 1/4W RES, METAL 2.0K 1% 1/4W	R74, 92, 11 R97, 136 R81, 102, 1 R51, 52, 53 R5 L3 L51 L52, 53	2, 132 1-246-469-00 1-246-811-00 22, 142 1-247-046-00 3, 54 1-247-083-00 1-247-765-00 1-408-654-00 1-413-089-00 1-413-090-00	RES, CARBON 680 5% 1/4W RES, CARBON 220K 5% 1/8W RES, CARBON 270K 5% 1/8W RES, CARBON 10 5% 1/4W RES, CARBON 33K 5% 1/2W INDUCTOR, MICRO 1mH 5% COIL, SN COIL, SN
	R6 R116 R75, 93, 113 R115 R76 R154 R71, 123 R78	1-214-101-00 19, 135 1-214-108-00 1-214-113-00 3, 133 1-214-115-00 1-214-116-00 1-214-122-00 1-214-125-00 1-214-135-00	RES, METAL 100 1% 1/4W RES, METAL 110 1% 1/4W RES, METAL 160 1% 1/4W RES, METAL 200 1% 1/4W RES, METAL 220 1% 1/4W RES, METAL 390 1% 1/4W RES, METAL 510 1% 1/4W RES, METAL 1K 1% 1/4W RES, METAL 1.3K 1% 1/4W RES, METAL 1.3K 1% 1/4W RES, METAL 2.0K 1% 1/4W	R74, 92, 11 R97, 136 R81, 102, 1 R51, 52, 53 R5 L3 L51 L52, 53	2, 132 1-246-469-00 1-246-811-00 22, 142 1-247-046-00 3, 54 1-247-083-00 1-247-765-00 1-408-654-00 1-413-089-00 1-413-090-00	RES, CARBON 680 5% 1/4W RES, CARBON 220K 5% 1/8W RES, CARBON 270K 5% 1/8W RES, CARBON 10 5% 1/4W RES, CARBON 33K 5% 1/2W INDUCTOR, MICRO 1mH 5% COIL, SN COIL, SN

Ref. No. Ref. No. or Q'ty Part No. Description or Q'tv Part No. Description (PW-91A BOARD, BVT-800PS) (PW-91A BOARD, BVT-800PS) 1 PC 7-686-548-01 SCREW, PSW 4X8 1-421-329-00 COIL, CHOKE D71, 134 8-719-102-52 **DIODE 1SZ52 D7** 8-719-115-07 DIODE RD156 L55, 57, 58, 59 D72, 93, 112, 131 8-719-139-07 **DIODE RD3.9E-B** 1-421-329-00 COIL, CHOKE D6, 16 8-719-200-02 DIODE 10E2 1-421-430-00 TRANSFORMER, LOW FREQ D5, 73, 74, 91, 92, 111, 113, 132, 133 8-719-815-55 **DIODE 1S1555** L56 1-421-459-00 COIL, CHOKE T2, 3 1-437-109-00 TRANSFORMER, DRIVE D8.9 8-719-901-17 **DIODE V11L** D51 8-719-901-18 **DIODE ESAD83** D1, 2, 3, 4 8-719-902-17 **DIODE U15G** 1-447-229-00 TRANSFORMER, CONVERTER D52 54 8-719-912-50 **DIODE ESAC25-02N** D53 8-719-912-52 **DIODE ESAC25-02C** CN51M 1,508,900,00 RECEP, 2P, MALE D10, 11, 13, 14 8-719-923-48 **DIODE 1S2348H** ∕ СИЗМ RECEP, 6P, MALE 1-508-904-00 D17, 18 (88888888888888 8-719-924-06 **DIODE ERC24-06S** D12, 15 8-719-930-12 DIODE EQB01-12Z Q112, 132 8-729-113-34 **TRANSISTOR 2SB733** 1-515-451-21 RELAY, 12V 500 OHMS Q72, 92 8-729-177-32 **TRANSISTOR 2SD773** 01 8-729-204-88 **TRANSISTOR 2SC3310** 1-554-058-21 SWITCH, THERMAL REED 70°C Q71, 91 8-729-900-07 **TRANSISTOR 2SB757** Q111, 131 8-729-984-70 **TRANSISTOR 2SD847** IC71, 111 ⚠ CN1M 8-759-132-40 IC UPC324C RECEP. 2P. MALE 1-560-176-00 Q73, 133 8-769-193-09 **TRANSISTOR 2SK43-3** M CN2M 1-560-723-00 RECEP, 3P, MALE ZT1 **VARISTOR ENB461-10A** 1-806-356-00 CN5F 1-509-585-00 PLUG HOUSING 4P 1-535-100-00 CONTACT, FEMALE CN4F 1-509-705-00 PLUG, HOUSING, 5P 1-535-100-00 CONTACT, FEMALE 2 PCS 1-535-324-00 PLUG, FASTEN, FEMALE 5 PCS 2-832-007-00 **BUSHING, INSULATING** 3 PCS 3-650-188-00 COLLAR, 6mm DIA. TP1, 2, 3, 7 PCS 7-621-981-25 SCREW, PSW 2.6X8 3 PCS 7-621-981-35 SCREW, PSW 2.6X10 7 PCS 7-686-529-01 SCREW, PSW 3X10

Ref. No. or Q'ty	Part No.	Description	Ref, No. or Q'ty	Part No.	Description
Of Q ty	Part No.	Description	·		Description
CT-29 B	OARD (B∨T	-800PS)	FRAME	(BVT-800PS)	
1 PC (This assem)	A-6263-037-A oly includes the f	COMPLETE PCB, CT-29 ollowing parts.)	R1 R2	1-214-105-00 1-247-825-00	RES, METAL 75 1% 1/4W RES, CARBON 560 5% 1/6W
C209, 211 C204	1-108-559-00 1-108-570-00	CAP, MYLAR 0.0015 5% 50V CAP, MYLAR 0.0043 5% 50V	CN41M CN23M	1-508-945-00 1-509-470-00	RECEP, 7P, MALE RECEP, 18P, MALE
C 207, 208	1-108-571-00	CAP, MYLAR 0.0047 5% 50V	CNRE 14E	,16F,35F,36F,	
C206	1-108-595-00	CAP, MYLAR 0.047 5% 50V	38F, 39		
C203	1-123-382-00	CAP, ELECT 3.3 20% 25V		1-509-983-00	PLUG, HOUSING, 2P
C202	1-123-356-00	CAP, ELECT 10 20% 25V		1-509-982-00	CONTACT, FEMALE
C205	1-123-330-00	CAP, ELECT 22 20% 25V	CN10F, 11	E 17E	
C212	1-161-055-00	CAP, CERAMIC 0.022 10% 50V	CIVIOF, II	1-509-986-00	PLUG, HOUSING, 5P
C201	1-161-888-00	CAP, CERAMIC 0.01 50V		1-509-982-00	CONTACT, FEMALE
R212	1-247-083-00	RES, CARBON 10 1% 1/4W			
R219	1-247-122-00	RES, CARBON 430 1% 1/4W	CN12F, 15	F, 19F, 22F	
				1-509-987-00	PLUG, HOUSING, 6P
R200, 220,		DEC 04 DECK! 41/41/4/4/4/4/4/4/4/4/4/4/4/4/4/4/4/4/4		1-509-982-00	CONTACT, FEMALE
	1-247-131-00	RES, CARBON 1K 1% 1/4W	CN9F, 18F	.21F	
R201, 208,	211		·	1-509-989-00	PLUG, HOUSING, 10P
	1-247-141-00	RES, CARBON 2.7K 1% 1/4W		1-509-982-00	CONTACT, FEMALE
R207	1-247-147-00	RES, CARBON 4.7K 1% 1/4W			
R207	1-247-152-00	RES, CARBON 4.7K 1% 1/4W	M CN61, 62	1-563-112-11	CONNECTOR, DIVERGE
R206	1-247-154-00	RES, CARBON 9.1K 1% 1/4W			
	4 047 457 00		- 6000000000000000000000000000000000000	e en el contrato en	
R205	1-247-157-00	RES, CARBON 12K 1% 1/4W	**************************************	······	
R205 R213, 216	1-247-157-00	RES, CARBON 12K 1% 1/4W RES, CARBON 15K 1% 1/4W	<u></u> SW1	1-570-117-31	SWITCH, SEESAW
R213, 216	1-247-159-00	RES, CARBON 15K 1% 1/4W		1-570-117-31	SWITCH, SEESAW
R213, 216		RES, CARBON 15K 1% 1/4W	<u></u> CB1	1-570-117-31 1-532-534-31	SWITCH, SEESAW BREAKER, CIRCUIT, AC250V 1.6A
R213, 216	1-247-159-00 214, 215, 217, 2	RES, CARBON 15K 1% 1/4W	<u></u> CB1	1-532-534-31	BREAKER, CIRCUIT, AC250V 1.6A
R213, 216 R203, 204, R202 RV201	1-247-159-00 214, 215, 217, 2 1-247-164-00 1-247-165-00 1-226-022-00	RES, CARBON 15K 1% 1/4W 18 RES, CARBON 24K 1% 1/4W RES, CARBON 27K 1% 1/4W RES, VAR, METAL 2K	⚠ CB1 1 PC	1-532-534-31 1-535-324-00	BREAKER, CIRCUIT, AC250V 1.6A TERMINAL, FASTEN
R213, 216 R203, 204, R202 RV201 RV202	1-247-159-00 214, 215, 217, 2 1-247-164-00 1-247-165-00 1-226-022-00 1-226-023-00	RES, CARBON 15K 1% 1/4W 18 RES, CARBON 24K 1% 1/4W RES, CARBON 27K 1% 1/4W RES, VAR, METAL 2K RES, VAR, METAL 5K	<u></u> CB1	1-532-534-31	BREAKER, CIRCUIT, AC250V 1.6A
R213, 216 R203, 204, R202 RV201	1-247-159-00 214, 215, 217, 2 1-247-164-00 1-247-165-00 1-226-022-00	RES, CARBON 15K 1% 1/4W 18 RES, CARBON 24K 1% 1/4W RES, CARBON 27K 1% 1/4W RES, VAR, METAL 2K	⚠ CB1 1 PC	1-532-534-31 1-535-324-00	BREAKER, CIRCUIT, AC250V 1.6A TERMINAL, FASTEN
R213, 216 R203, 204, R202 RV201 RV202 R209, 210	1-247-159-00 214, 215, 217, 2 1-247-164-00 1-247-165-00 1-226-022-00 1-226-023-00 1-247-052-00 1-508-904-00 8-719-100-27	RES, CARBON 15K 1% 1/4W 18 RES, CARBON 24K 1% 1/4W RES, CARBON 27K 1% 1/4W RES, VAR, METAL 2K RES, VAR, METAL 5K RES, CARBON 820K 5% 1/8W	<u>↑</u> CB1 1 PC M1	1-532-534-31 1-535-324-00 1-541-170-31	BREAKER, CIRCUIT, AC250V 1.6A TERMINAL, FASTEN MOTOR, FAN, DC
R213, 216 R203, 204, R202 RV201 RV202 R209, 210 CN 201M D201	1-247-159-00 214, 215, 217, 2 1-247-164-00 1-247-165-00 1-226-022-00 1-226-023-00 1-247-052-00 1-508-904-00	RES, CARBON 15K 1% 1/4W 18 RES, CARBON 24K 1% 1/4W RES, CARBON 27K 1% 1/4W RES, VAR, METAL 2K RES, VAR, METAL 5K RES, CARBON 820K 5% 1/8W RECEP, 6P, MALE DIODE RD4.7E-B2	<u>↑</u> CB1 1 PC M1 SW3, 4	1-532-534-31 1-535-324-00 1-541-170-31 1-552-822-00	BREAKER, CIRCUIT, AC250V 1.6A TERMINAL, FASTEN MOTOR, FAN, DC SWITCH, SLIDE
R213, 216 R203, 204, R202 RV201 RV202 R209, 210 CN201M D201 Q201 IC202	1-247-159-00 214, 215, 217, 2 1-247-164-00 1-247-165-00 1-226-022-00 1-226-023-00 1-247-052-00 1-508-904-00 8-719-100-27 8-729-606-32 8-759-145-57	RES, CARBON 15K 1% 1/4W 18 RES, CARBON 24K 1% 1/4W RES, CARBON 27K 1% 1/4W RES, VAR, METAL 2K RES, VAR, METAL 5K RES, CARBON 820K 5% 1/8W RECEP, 6P, MALE DIODE RD4.7E-B2 TRANSISTOR 2SC2603 IC UPC4557C	↑ CB1 1 PC M1 SW3, 4 ↑ SW2	1-532-534-31 1-535-324-00 1-541-170-31 1-552-822-00 1-554-011-00	BREAKER, CIRCUIT, AC250V 1.6A TERMINAL, FASTEN MOTOR, FAN, DC SWITCH, SLIDE SWITCH, VOLTAGE SELECT
R213, 216 R203, 204, R202 RV201 RV202 R209, 210 CN201M D201 Q201 IC202	1-247-159-00 214, 215, 217, 2 1-247-164-00 1-247-165-00 1-226-022-00 1-226-023-00 1-247-052-00 1-508-904-00 8-719-100-27 8-729-606-32 8-759-145-57	RES, CARBON 15K 1% 1/4W 18 RES, CARBON 24K 1% 1/4W RES, CARBON 27K 1% 1/4W RES, VAR, METAL 2K RES, VAR, METAL 5K RES, CARBON 820K 5% 1/8W RECEP, 6P, MALE DIODE RD4.7E-B2 TRANSISTOR 2SC2603 IC UPC4557C	⚠ CB1 1 PC M1 SW3, 4 ⚠ SW2 ⚠ 1 PC CN40M	1-532-534-31 1-535-324-00 1-541-170-31 1-552-822-00 1-554-011-00 1-556-559-31 1-560-495-00	BREAKER, CIRCUIT, AC250V 1.6A TERMINAL, FASTEN MOTOR, FAN, DC SWITCH, SLIDE SWITCH, VOLTAGE SELECT CORD, POWER, 3P
R213, 216 R203, 204, R202 RV201 RV202 R209, 210 CN201M D201 Q201 IC202	1-247-159-00 214, 215, 217, 2 1-247-164-00 1-247-165-00 1-226-022-00 1-226-023-00 1-247-052-00 1-508-904-00 8-719-100-27 8-729-606-32 8-759-145-57	RES, CARBON 15K 1% 1/4W 18 RES, CARBON 24K 1% 1/4W RES, CARBON 27K 1% 1/4W RES, VAR, METAL 2K RES, VAR, METAL 5K RES, CARBON 820K 5% 1/8W RECEP, 6P, MALE DIODE RD4.7E-B2 TRANSISTOR 2SC2603 IC UPC4557C	↑ CB1 1 PC M1 SW3, 4 ↑ SW2	1-532-534-31 1-535-324-00 1-541-170-31 1-552-822-00 1-554-011-00 1-556-559-31 1-560-495-00	BREAKER, CIRCUIT, AC250V 1.6A TERMINAL, FASTEN MOTOR, FAN, DC SWITCH, SLIDE SWITCH, VOLTAGE SELECT CORD, POWER, 3P
R213, 216 R203, 204, R202 RV201 RV202 R209, 210 CN201M D201 Q201 IC202	1-247-159-00 214, 215, 217, 2 1-247-164-00 1-247-165-00 1-226-022-00 1-226-023-00 1-247-052-00 1-508-904-00 8-719-100-27 8-729-606-32 8-759-145-57	RES, CARBON 15K 1% 1/4W 18 RES, CARBON 24K 1% 1/4W RES, CARBON 27K 1% 1/4W RES, VAR, METAL 2K RES, VAR, METAL 5K RES, CARBON 820K 5% 1/8W RECEP, 6P, MALE DIODE RD4.7E-B2 TRANSISTOR 2SC2603 IC UPC4557C	⚠ CB1 1 PC M1 SW3, 4 ⚠ SW2 ⚠ 1 PC CN40M	1-532-534-31 1-535-324-00 1-541-170-31 1-552-822-00 1-554-011-00 1-556-559-31 1-560-495-00 20F	BREAKER, CIRCUIT, AC250V 1.6A TERMINAL, FASTEN MOTOR, FAN, DC SWITCH, SLIDE SWITCH, VOLTAGE SELECT CORD, POWER, 3P RECEP, D-SUB 15P, MALE
R213, 216 R203, 204, R202 RV201 RV202 R209, 210 CN201M D201 Q201 IC202	1-247-159-00 214, 215, 217, 2 1-247-164-00 1-247-165-00 1-226-022-00 1-226-023-00 1-247-052-00 1-508-904-00 8-719-100-27 8-729-606-32 8-759-145-57	RES, CARBON 15K 1% 1/4W 18 RES, CARBON 24K 1% 1/4W RES, CARBON 27K 1% 1/4W RES, VAR, METAL 2K RES, VAR, METAL 5K RES, CARBON 820K 5% 1/8W RECEP, 6P, MALE DIODE RD4.7E-B2 TRANSISTOR 2SC2603 IC UPC4557C	⚠ CB1 1 PC M1 SW3, 4 ⚠ SW2 ⚠ 1 PC CN40M	1-532-534-31 1-535-324-00 1-541-170-31 1-552-822-00 1-554-011-00 1-556-559-31 1-560-495-00 20F 1-561-056-00	BREAKER, CIRCUIT, AC250V 1.6A TERMINAL, FASTEN MOTOR, FAN, DC SWITCH, SLIDE SWITCH, VOLTAGE SELECT CORD, POWER, 3P RECEP, D-SUB 15P, MALE PLUG, HOUSING, 12P
R213, 216 R203, 204, R202 RV201 RV202 R209, 210 CN201M D201 Q201 IC202	1-247-159-00 214, 215, 217, 2 1-247-164-00 1-247-165-00 1-226-022-00 1-226-023-00 1-247-052-00 1-508-904-00 8-719-100-27 8-729-606-32 8-759-145-57	RES, CARBON 15K 1% 1/4W 18 RES, CARBON 24K 1% 1/4W RES, CARBON 27K 1% 1/4W RES, VAR, METAL 2K RES, VAR, METAL 5K RES, CARBON 820K 5% 1/8W RECEP, 6P, MALE DIODE RD4.7E-B2 TRANSISTOR 2SC2603 IC UPC4557C	↑ CB1 1 PC M1 SW3, 4 ↑ SW2 1 PC CN40M CN6F, 13F,	1-532-534-31 1-535-324-00 1-541-170-31 1-552-822-00 1-554-011-00 1-556-559-31 1-560-495-00 20F 1-561-056-00 1-509-982-00	BREAKER, CIRCUIT, AC250V 1.6A TERMINAL, FASTEN MOTOR, FAN, DC SWITCH, SLIDE SWITCH, VOLTAGE SELECT CORD, POWER, 3P RECEP, D-SUB 15P, MALE PLUG, HOUSING, 12P CONTACT, FEMALE
R213, 216 R203, 204, R202 RV201 RV202 R209, 210 CN201M D201 Q201 IC202	1-247-159-00 214, 215, 217, 2 1-247-164-00 1-247-165-00 1-226-022-00 1-226-023-00 1-247-052-00 1-508-904-00 8-719-100-27 8-729-606-32 8-759-145-57	RES, CARBON 15K 1% 1/4W 18 RES, CARBON 24K 1% 1/4W RES, CARBON 27K 1% 1/4W RES, VAR, METAL 2K RES, VAR, METAL 5K RES, CARBON 820K 5% 1/8W RECEP, 6P, MALE DIODE RD4.7E-B2 TRANSISTOR 2SC2603 IC UPC4557C	⚠ CB1 1 PC M1 SW3, 4 ⚠ SW2 ⚠ 1 PC CN40M	1-532-534-31 1-535-324-00 1-541-170-31 1-552-822-00 1-554-011-00 1-556-559-31 1-560-495-00 20F 1-561-056-00	BREAKER, CIRCUIT, AC250V 1.6A TERMINAL, FASTEN MOTOR, FAN, DC SWITCH, SLIDE SWITCH, VOLTAGE SELECT CORD, POWER, 3P RECEP, D-SUB 15P, MALE PLUG, HOUSING, 12P
R213, 216 R203, 204, R202 RV201 RV202 R209, 210 CN201M D201 Q201 IC202	1-247-159-00 214, 215, 217, 2 1-247-164-00 1-247-165-00 1-226-022-00 1-226-023-00 1-247-052-00 1-508-904-00 8-719-100-27 8-729-606-32 8-759-145-57	RES, CARBON 15K 1% 1/4W 18 RES, CARBON 24K 1% 1/4W RES, CARBON 27K 1% 1/4W RES, VAR, METAL 2K RES, VAR, METAL 5K RES, CARBON 820K 5% 1/8W RECEP, 6P, MALE DIODE RD4.7E-B2 TRANSISTOR 2SC2603 IC UPC4557C	↑ CB1 1 PC M1 SW3, 4 ↑ SW2 ↑ 1 PC CN40M CN6F, 13F	1-532-534-31 1-535-324-00 1-541-170-31 1-552-822-00 1-554-011-00 1-556-559-31 1-560-495-00 20F 1-561-056-00 1-509-982-00	BREAKER, CIRCUIT, AC250V 1.6A TERMINAL, FASTEN MOTOR, FAN, DC SWITCH, SLIDE SWITCH, VOLTAGE SELECT CORD, POWER, 3P RECEP, D-SUB 15P, MALE PLUG, HOUSING, 12P CONTACT, FEMALE PLUG, HOUSING, 2P
R213, 216 R203, 204, R202 RV201 RV202 R209, 210 CN201M D201 Q201 IC202	1-247-159-00 214, 215, 217, 2 1-247-164-00 1-247-165-00 1-226-022-00 1-226-023-00 1-247-052-00 1-508-904-00 8-719-100-27 8-729-606-32 8-759-145-57	RES, CARBON 15K 1% 1/4W 18 RES, CARBON 24K 1% 1/4W RES, CARBON 27K 1% 1/4W RES, VAR, METAL 2K RES, VAR, METAL 5K RES, CARBON 820K 5% 1/8W RECEP, 6P, MALE DIODE RD4.7E-B2 TRANSISTOR 2SC2603 IC UPC4557C	↑ CB1 1 PC M1 SW3, 4 ↑ SW2 1 PC CN40M CN6F, 13F,	1-532-534-31 1-535-324-00 1-541-170-31 1-552-822-00 1-554-011-00 1-556-559-31 1-560-495-00 20F 1-561-056-00 1-509-982-00 1-561-069-00 1-535-206-00	BREAKER, CIRCUIT, AC250V 1.6A TERMINAL, FASTEN MOTOR, FAN, DC SWITCH, SLIDE SWITCH, VOLTAGE SELECT CORD, POWER, 3P RECEP, D-SUB 15P, MALE PLUG, HOUSING, 12P CONTACT, FEMALE PLUG, HOUSING, 2P CONTACT, FEMALE
R213, 216 R203, 204, R202 RV201 RV202 R209, 210 CN201M D201 Q201 IC202	1-247-159-00 214, 215, 217, 2 1-247-164-00 1-247-165-00 1-226-022-00 1-226-023-00 1-247-052-00 1-508-904-00 8-719-100-27 8-729-606-32 8-759-145-57	RES, CARBON 15K 1% 1/4W 18 RES, CARBON 24K 1% 1/4W RES, CARBON 27K 1% 1/4W RES, VAR, METAL 2K RES, VAR, METAL 5K RES, CARBON 820K 5% 1/8W RECEP, 6P, MALE DIODE RD4.7E-B2 TRANSISTOR 2SC2603 IC UPC4557C	↑ CB1 1 PC M1 SW3, 4 ↑ SW2 ↑ 1 PC CN40M CN6F, 13F	1-532-534-31 1-535-324-00 1-541-170-31 1-552-822-00 1-554-011-00 1-556-559-31 1-560-495-00 20F 1-561-056-00 1-509-982-00 1-561-069-00 1-535-206-00	BREAKER, CIRCUIT, AC250V 1.6A TERMINAL, FASTEN MOTOR, FAN, DC SWITCH, SLIDE SWITCH, VOLTAGE SELECT CORD, POWER, 3P RECEP, D-SUB 15P, MALE PLUG, HOUSING, 12P CONTACT, FEMALE PLUG, HOUSING, 2P

FRAME, ACCESSORIES, PAKING, FIXTURE

Ref. No.

or Q'ty Part No. Description

(FRAME, BVT-800PS)

CN25F, 26F, 27F, 28F, 29F, 30F, 32F, 33F, 34F

1-561-781-21 RECEP, BNC, FEMALE

<u></u> CN2F 1-561-828-00 PLUG, HOUSING, 3P . 551-526-00 PLUG, HOUSING, 3P 1-535-206-00 CONTACT, FEMALE Ref. No.

or Q'ty Part No. Description

PACKING MATERIAL (BVT-800PS)

1 PC	3-701-616-00	BAG, POLYETHYLENE
		(FOR SCREWS)
2 PCS	3-701-619-00	BAG, POLYETHYLENE
		(FOR RACK ANGLE ASSY)
2 PCS	3-701-630-00	BAG, POLYETHYLENE
		(FOR MANUAL AND CABLE)
1 PC	3-701-634-00	BAG, POLYETHYLENE
		(FOR EB-9A BOARD)
1 PC	4-854-939-00	BAG, POLYETHYLENE
		(FOR BVT-800PS)

ACCESSORIES SUPPLIED (BVT-800PS)

1 PC	A-6252-050-A	EB-9A ASSY
R2, 6	1-246-457-00	RES, CARBON 220 5% 1/4W
R1, 5	1-246-469-00	RES, CARBON 680 5% 1/4W
1 PC	1-508-892-00	CONNECTOR, PCB, 100P
2 PCS	3-657-235-00	TERMINAL, TP
10 PCS	7-621-981-15	SCREW, PSW 2.6X6
4 PCS	7-621-981-25	SCREW, PSW 2.6X8
8 PCS	7-686-527-01	SCREW, PSW 3X6
D1, 2, 3, 5	8-719-812-41	LED, TLR124, RED
2 PCS	X-3673-210-2	ANGLE ASSY, RACK
1 PC	1-556-155-00 1-508-495-00 1-508-496-00	CABLE ASSY, 18P, 3m PLUG, 18P, MALE PLUG, 18P, FEMALE
1 PC	3-654-748-00	SPACER
4 PCS	7-682-262-14	SCREW, +K 4X10
4 PCS	7-686-637-09	SCREW, B 4X12

OPTIONAL FIXTURE (BVT-800PS)

7-700-733-01 ALIGNMENT SCREWDRIVER, **SLOTTED HEAD** 7-700-736-06 HEXAGONAL WRENCH, L-SHAPED, 0.89 mm 7-721-050-63 SCREWDRIVER, TOTSU, 3mm DI A. 7-721-050-64 SCREWDRIVER, TOTSU, 4mm DI A.

J-6041-770-A IC TEST CLIP, TC-16 J-6041-780-A IC TEST CLIP, TC-20

Manufacturer;

AP Products Incorporated BOX 697 72 Corwin Drive Painesville, Ohio 44077, USA TEL: 216-354-2101

SECTION E **CHANGED PARTS**

UP TO #10199 (BVT-800PS, FOR PAL) #10201 & UP (BVT-800PS, FOR PAL)

SG-67 BOARD

R569 1-214-180-00 RES, METAL 100K 1% 1/4W 1-214-175-00 RES, METAL 62K 1% 1/4W

UP TO #10199 (BVT-800PS, FOR PAL)

#10201 & UP (BVT-800PS, FOR PAL) #70001 & UP (BVT-800PS, FOR SECAM)

PR-40 BOARD

C513	1-161-055-00	CAP, CERAMIC 0.022 10% 50V	DELETED	
R604	1-214-109-00	RES, METAL 100 1% 1/4W	1-214-105-00	RES, METAL 75 1% 1/4W
R539	1-214-113-00	RES, METAL 160 1% 1/4W	1-214-118-00	RES, METAL 270 1% 1/4W
R673	1-214-121-00	RES, METAL 360 1% 1/4W	DELETED	
R623	NOT IN USE		1-214-121-00	RES, METAL 360 1% 1/4W
R121	1-214-139-00	RES, METAL 2.0K 1% 1/4W	1-214-136-00	RES, METAL 1.5K 1% 1/4W
R674	1-214-163-00	RES, METAL 20K 1% 1/4W	DELETED	
R624	NOT IN USE		1-214-165-00	RES, METAL 24K 1% 1/4W
R289	1-214-165-00	RES, METAL 24K 1% 1/4W	DELETED	
RV 1 10	NOT IN USE		1-228-291-00	RES, VAR, METAL 1K
TP507	NOT IN USE		3-657-235-00	TERMINAL, TP

UP TO #10299 (BVT-800PS, FOR PAL)

#10301 & UP (BVT-800PS, FOR PAL)

SG-67 BOARD

R569	1-214-175-00	RES, METAL 62K 1% 1/4W	DELETED
R√505	1-228-294-00	RES, VAR, METAL 10K	DELETED

#10401 & UP (BVT-800PS, FOR PAL) UP TO #10399 (BVT-800PS, FOR PAL)
UP TO #70099 (BVT-800PS, FOR SECAM) #70101 & UP (BVT-800PS, FOR SECAM)

PR-40 BOARD

R620	1-214-140-00	RES, METAL 2.2K 1% 1/4W	DELETED	RES, METAL 3.3K 1% 1/4W
R661	1-214-146-00	RES, METAL 3.9K 1% 1/4W	1-214-144-00	
R584	1-214-147-00	RES, METAL 4.3K 1% 1/4W	DELETED	
R621	1-214-160-00	RES, METAL 15K 1% 1/4W	DELETED	
R622	1-214-164-00	RES, METAL 22K 1% 1/4W	DELETED	
R635	1-214-166-00	RES, METAL 27K 1% 1/4W	1-214-165-00	RES, METAL 24K 1% 1/4W
RV507	1-228-295-00	RES, VAR, METAL 20K	DELETED	
Q514	8-761-622-00	TRANSISTOR 2SC1636	DELETED	

UP TO #10499 (BVT-800PS, FOR PAL) #10501 & UP (BVT-800PS, FOR PAL)

SG-67 BOARD

R232 1-214-156-00 RES, METAL 10K 1% 1/4W RV210 NOT IN USE

TP211 NOT IN USE

1-214-155-00 RES, METAL 9.1K 1% 1/4W 1-228-292-00 RES, VAR, METAL 20K

3-657-235-00 TERMINAL, TP

UP TO #10499 (BVT-800PS, FOR PAL)

#10501 & UP (BVT-800PS, FOR PAL) **#70001 & UP** (BVT-800PS, FOR SECAM)

CK-11 BOARD

IC1P NOT IN USE 8-759-901-57 IC SN74LS157N, TTL

UP TO #10499 (BVT-800PS, FOR PAL) UP TO #10499 (BVT-800PS, FOR PAL)
UP TO #70199 (BVT-800PS, FOR SECAM) #10501 & UP (BVT-800PS, FOR PAL) #70201 & UP (BVT-800PS, FOR SECAM)

PR-40 BOARD

R539 1-214-118-00 RES, METAL 270 1% 1/4W 1-214-119-00 RES, METAL 300 1% 1/4W

CK-11 BOARD

R50 1-214-120-00 RES, METAL 330 1% 1/4W 1-214-123-00 RES, METAL 430 1% 1/4W

CT-29 BOARD

R222 1-246-473-00 RES, CARBON 1K 1% 1/4W 1-214-132-00 RES, METAL 1K 1% 1/4W

UP TO #10599 (BVT-800PS, FOR PAL)
UP TO #70199 (BVT-800PS, FOR SECAM)

#10601 & UP (BVT-800PS, FOR PAL) #70201 & UP (BVT-800PS, FOR SECAM)

PR-40 BOARD

C110, 125

1-123-343-00 CAP, ELECT 33 35V

1-131-374-00 CAP, TANT 33 10% 16V

UP TO #10799 (BVT-800PS, FOR PAL) **UP TO #70199** (BVT-800PS, FOR SECAM) #10801 & UP (BVT-800PS, FOR PAL) **#70201 & UP** (BVT-800PS, FOR SECAM)

PW-91A BOARD

R8, 12 1-244-632-00 RES, CARBON 20 5% 1/4W

RES, CARBON 20 5% 1/4W 1-246-432-00

R74, 92, 112, 132

1-244-669-00 RES, CARBON 680 5% 1/4W

1-246-469-00 RES, CARBON 680 5% 1/4W

UP TO #10899 (BVT-800PS, FOR PAL)

#10901 & UP (BVT-800PS, FOR PAL)

SG-67 BOARD

R4O 1-214-168-00 RES, METAL 33K 1% 1/4W 1-214-163-00 RES. METAL 2K 1% 1/4W

UP TO #10899 (BVT-800PS, FOR PAL)

#10901 & UP (BVT-800PS, FOR PAL) #70201 & UP (BVT-800PS, FOR SECAM)

UP TO #70199 (BVT-800PS, FOR SECAM)

POWER SUPPLY ASSY

3-648-057-00 NUT, U

3-680-316-00 NUT, NYLON, 4

REAR PANEL ASSY

3-648-057-00 NUT, U

3-680-316-00 NUT, NYLON, 4

UP TO #11100 (BVT-800PS, FOR PAL)

UP TO #70199 (BVT-800PS, FOR SECAM)

#11101 & UP (BVT-800PS, FOR PAL) **#70201 & UP** (BVT-800PS, FOR SECAM)

PW-91 BOARD

1-130-455-00 CAP, FILM 0.01 20% 250V C1

1-130-917-00 CAP, FILM 0.1 20% 250V RES, METAL 82 1/2W 1% 1-212-507-00

1-136-210-00 CAP, FILM 0.01 20% 250V 1-136-212-00 CAP, FILM 0.1 20% 250V 1-217-300-00 RES, WIREWOUND 15 5W 10%

R56, 57, 58, 59

1-212-507-00 RES, METAL 82 1/2W 1%

DELETED

1-205-739-00

R51,52,53,54

1-214-084-00 RES, METAL 10 1/4W 1%

1-247-083-00 RES, CARBON 10 1/4W 5%

R1 1-217-297-00 RES, WIREWOUND 8.2 5W 10% RELAY, 12V 500 OHMS RY1 1-515-451-00

SWITCH, THERMAL REED 70°C SW3 1-554-058-00 ZT2

1-515-451-21 RELAY, 12V 500 OHMS 1-554-058-21 SWITCH, THERMAL REED 70°C

RES, WIREWOUND 8.2 5W 10%

1-806-355-00 VARISTOR ENB221-10A DELETED

FRAME

1-556-559-00 CORD, POWER

1-556-559-31 CORD, POWER

NOT IN USE

UP TO #11599 (BVT-800PS, FOR PAL) #11601 & UP (BVT-800PS, FOR PAL) SG-67 BOARD R27 1-214-148-00 RES, METAL 4700 1% 1/4W 1-214-139-00 RES, METAL 2K 1% 1/4W UP TO #11699 (BVT-800PS, FOR PAL) #11701 & UP (BVT-800PS, FOR PAL) **UP TO #70299** (BVT-800PS, FOR SECAM) #70301 & UP (BVT-800PS, FOR SECAM) CT-29 BOARD 1-131-356-00 CAP, TANT 3.3 10% 25V 1-131-359-00 CAP, TANT 10 10% 25V 1-131-367-00 CAP, TANT 22 10% 20V C203 1-123-382-00 CAP, ELECT 3.3 20% 100V C202 1-123-356-00 CAP, ELECT 10 20% 25V C205 1-123-330-00 CAP, ELECT 22 20% 25V R212 1-214-084-00 RES, METAL 10 1/4W 1% 1-247-083-00 RES, CARBON 10 1/4W 5% R219 1-214-123-00 RES, METAL 430 1/4W 1% 1-247-122-00 RES, CARBON 430 1/4W 5% R200, 220, 222 1-214-132-00 RES, METAL 1K 1/4W 1% 1-247-131-00 RES, CARBON 1K 1/4W 5% R201, 208, 211 1-214-142-00 RES, METAL 2.7K 1/4W 1% 1-247-141-00 RES, CARBON 2.7K 1/4W 5% R207 1-214-148-00 RES, METAL 4.7K 1/4W 1% 1-247-147-00 RES, CARBON 4.7K 1/4W 5% RES, METAL 7.5K 1/4W 1% R221 1-214-153-00 1-247-152-00 RES, CARBON 7.5K 1/4W 5% R206 1-214-155-00 RES, METAL 9.1K 1/4W 1% 1-247-154-00 RES, CARBON 9.1K 1/4W 5% R205 1-214-158-00 RES, METAL 12K 1/4W 1% 1-247-157-00 RES, CARBON 12K 1/4W 5% R213, 216 1-214-160-00 RES, METAL 15K 1/4W 1% 1-247-159-00 RES, CARBON 15K 1/4W 5% R203, 204, 214, 215, 217, 218 1-214-165-00 RES, METAL 24K 1/4W 1% 1-247-164-00 RES, CARBON 24K 1/4W 5% R202 1-214-166-00 RES, METAL 27K 1/4W 1% 1-247-165-00 RES, CARBON 27K 1/4W 5% **UP TO #11899** (BVT-800PS, FOR PAL) #11901 & UP (BVT-800PS, FOR PAL) **UP TO #70299** (BVT-800PS, FOR SECAM) #70301 & UP (BVT-800PS, FOR SECAM) PR-40 BOARD IC132 8-759-900-04 IC SN74LS04N, TTL 8-759-910-04 IC SN74S04N, TTL UP TO #11999 (BVT-800PS, FOR PAL) #12001 & UP (BVT-800PS, FOR PAL) **UP TO #70399** (BVT-800PS, FOR SECAM) #70401 & UP (BVT-800PS, FOR SECAM) FRAME

1-247-825-00 RES, CARBON 560 5% 1/6W

UP TO #12199 (BVT-800PS, FOR PAL) UP TO #70399 (BVT-800PS, FOR SECAM) #12201 & UP (BVT-800PS, FOR PAL) #**70401 & UP** (BVT-800PS, FOR SECAM)

POWER SUPPLY ASSY

4-823-115-00 SPRING, COMPRESSION

3-303-890-01 SPRING, COMPRESSION

REAR PANEL ASSY

4-823-115-00 SPRING, COMPRESSION 4-2

3-303-890-01 SPRING, COMPRESSION

UP TO #12599 (BVT-800PS, FOR PAL) UP TO #70399 (BVT-800PS, FOR SECAM) #12601 & UP (BVT-800PS, FOR PAL) #70401 & UP (BVT-800PS, FOR SECAM)

PW-91A BOARD

1-211-673-00 RES, CARBON 30K 5% 1/2W 1-247-765-00 RES, CARBON 33K 5% 1/2W R5

UP TO #12799 (BVT-800PS, FOR PAL) UP TO #70399 (BVT-800PS, FOR SECAM) #12801 & UP (BVT-800PS, FOR PAL) #70401 & UP (BVT-800PS, FOR SECAM)

PW-91A BOARD

2 PCS

7-686-527-01 SCREW, PSW 3X6 5 PCS 2 PCS 7-686-528-01 SCREW, PSW 3X8

7-686-529-01 SCREW, PSW 3X10

DELETED DELETED 7 PCS

UP TO #12799 (BVT-800PS, FOR PAL) #12801 & **UP** (BVT-800PS, FOR PAL) **UP TO** #70599 (BVT-800PS, FOR SECAM) #70601 & **UP** (BVT-800PS, FOR SECAM) #12801 & UP (BVT-800PS, FOR PAL)

SG-68 BOARD

R341 1-214-154-00 RES, METAL 8.2K 1% 1/4W 1-214-153-00 RES, METAL 7.5K 1% 1/4W

PR-40 BOARD

R593 1-214-138-00 RES, METAL 1.8K 1% 1/4W

1-214-136-00 RES, METAL 1.5K 1% 1/4W

UP TO #12999 (BVT-800PS, FOR PAL) **UP TO #70599** (BVT-800PS, FOR SECAM)

#13001 & UP (BVT-800PS, FOR PAL) #70601 & UP (BVT-800PS, FOR SECAM)

FRAME

CB1

1-516-379-00 SWITCH, ROCKER

1-532-534-00 BREAKER, CIRCUIT, AC250V 1.6A

1-570-117-11 SWITCH, SEESAW 1-532-534-31 BREAKER, CIRCU

BREAKER, CIRCUIT, AC250V 1.6A

PW-91A BOARD

8-729-133-53 TRANSISTOR 2SC2335 Q1

8-729-204-88 TRANSISTOR 2SC3310

CHANGED PARTS

UP TO #70610 (BVT-800PS, FOR SECAM) **#70611 & UP** (BVT-800PS, FOR SECAM)

SG-68 BOARD

R341 1-214-154-00 RES, METAL 8.2K 1% 1/4W 1-214-153-00 RES, METAL 7.5K 1% 1/4W

UP TO #13100 (BVT-800PS, FOR PAL)
UP TO #70610 (BVT-800PS, FOR SECAM)

#13101 & UP (BVT-800PS, FOR PAL) #70611 & UP (BVT-800PS, FOR SECAM)

SG-67 BOARD

1-554-012-00 SWITCH, DIP, 8-CKT

1-570-281-11 SWITCH, DIP

PR-40 BOARD

1-554-012-00 SWITCH, DP, 8-CKT

1-570-281-11 SWITCH, DIP

UP TO #13600 (BVT-800PS, FOR PAL) UP TO #70700 (BVT-800PS, FOR SECAM)

#13601 & UP (BVT-800PS, FOR PAL) #70701 & UP (BVT-800PS, FOR SECAM)

CHASSIS ASSY

2-252-630-00 PLATE, ORNAMENTAL, HANDLE 2-252-630-02 PLATE, ORNAMENTAL, HANDLE 2-4

UP TO #13699 (BVT-800PS, FOR PAL) UP TO #70799 (BVT-800PS, FOR SECAM)

#13701 & UP (BVT-800PS, FOR PAL) #70801 & UP (BVT-800PS, FOR SECAM)

PR-40 BOARD

IC529, 530 8-759-907-93 IC µA796HC-B

8-759-000-05 IC MC1496G; MOTOROLA

SG-67 BOARD

IC1L, 1P, 1W, 2H, 2R, 2U, 2Z, 3K, 4K, 4W, 5G, 5K

8-759-907-93 IC µA796HC-B

8-759-000-05 IC MC1496G; MOTOROLA

SG-68 BOARD

IC1E, 1R, 2P, 3E, 5C

8-759-907-93 IC μΑ796HC-B

8-759-000-05 IC MC1496G; MOTOROLA

IV-4A BOARD

IC3 8-759-907-93 IC μA796HC-B

8-759-000-05 IC MC1496G; MOTOROLA

UP TO #13699 (BVT-800PS, FOR PAL)
UP TO #70899 (BVT-800PS, FOR SECAM)

#13701 & UP (BVT-800PS, FOR PAL) #70901 & UP (BVT-800PS, FOR SECAM)

IV-4A BOARD

R87	1-214-139-00	RES, METAL 2K 1% 1/4W	1-214-132-00	RES, METAL 1K 1% 1/4W
R89	1-214-132-00	RES, METAL 1K 1% 1/4W	1-214-139-00	RES, METAL 2K 1% 1/4W
R91	1-214-180-00	RES, METAL 100K 1% 1/4W	1-247-887-00	RES, CARBON 220K 5% 1/6W
C38	1-131-347-00	CAP, TANT 1 10% 35V	1-131-359-00	CAP, TANT 10 10% 25V
D14, 15	8-719-815-55	DIODE 1S1555	DELETED	
D16, 17	8-719-815-55	DIODE 1S1555	8-719-104-10	DIODE 1SS99

UP TO #14099 (BVT-800PS, FOR PAL)
UP TO #71099 (BVT-800PS, FOR SECAM)

#14101 & UP (BVT-800PS, FOR PAL) #71101 & UP (BVT-800PS, FOR SECAM)

PR-40 BOARD

R238 1-214-149-00 RES, METAL 5.1K 1% 1/4W 1-214-132-00 RES, METAL 1K 1% 1/4W R242 1-214-149-00 RES, METAL 5.1K 1% 1/4W 1-214-151-00 RES, METAL 6.2K 1% 1/4W

UP TO #14299 (BVT-800PS, FOR PAL)
UP TO #71099 (BVT-800PS, FOR SECAM)

#14301 & UP (BVT-800PS, FOR PAL) #71201 & UP (BVT-800PS, FOR SECAM)

CK-11 BOARD

R36 1-214-159-00 RES, METAL 13K 1% 1/4W

1-214-162-00 RES, METAL 18K 1% 1/4W